The influence of network structures on the adaptive efficiency of industrial districts -- a comparison of the footwear industry in Italy and the UK

Vecchi, Alessandra

Award date:
2006

Awarding institution:
University of Bath

'THE INFLUENCE OF NETWORK STRUCTURES ON THE ADAPTIVE EFFICIENCY OF INDUSTRIAL DISTRICTS – A COMPARISON OF THE FOOTWEAR INDUSTRY IN ITALY AND THE UK'

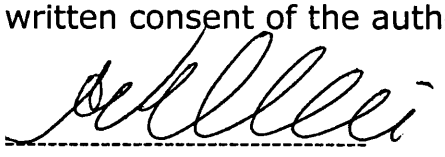
Alessandra Vecchi

Thesis submitted for the degree of Doctor in Philosophy

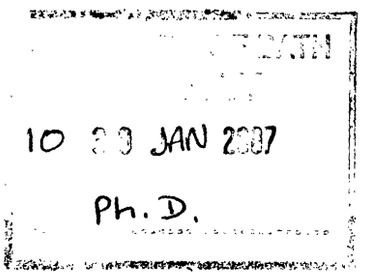
University of Bath
School of Management

October 2006

COPYRIGHT



ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346


10 JAN 2007
PH.D.

ACKNOWLEDGMENTS

I owe much gratitude to my Supervisor, Dr. Alan Butt-Philip. He has inspired and guided my work from its early stages. I am extremely grateful to him for the solid support and encouragement that I received over the years of my research, especially *when things were tough*.

I would like to thank you Dr. Kate Blackmon for her invaluable guidance to my study at its early inception. Our lengthy discussion opened up for me new paths of theory with which to explore, and methodologies with which to approach the research topic.

The constructive feedback of Eleanor Morgan during my transfer from MPhil to Phd has been taken into account in the design and the conduct of the case studies. I would also like to thank you Dr. Emmanuel Fragnière for his advice in developing the methodology. My gratitude goes to Dr Felicia Fai and Professor Frank McDonald who provided extensive feedback as well as ideas for future work.

This research would not have materialised without the participation of companies in Italy and Britain. I am of course grateful to them for having taken part in the study.

Most importantly I am grateful to my family for being always so supportive and caring with me particularly during this last year. Their love and support has made me see things through.

To the memory of my grandfather

'We live in a world full of contradiction and paradox, a fact of which perhaps the most fundamental illustration is this: that the existence of a problem of knowledge depends on the future being different from the past, while the solution of the problem depends on the future being like the past'

-F. Knight (1922)

ABSTRACT

This research addresses the theme of the viability of industrial districts in dealing with dramatic changes in their competitive environment. In particular, in the light of the changes that globalisation encompasses, some observers express doubts about the viability of industrial districts as organisational forms of production that are to a different extent embedded in dense networks developed over time and in geographical proximity (Amin & Thrift, 1994; Harrison, 1994; Harrison et. al., 1996; Berger & Locke, 2001; Nassimbeni, 2002; Guerrieri & Pietrobelli, 2000).

By relying on a cross-national comparison and a mono-sectoral investigation of the footwear industry, this study attempts to shed the light on the formulae or "recipes" for both success and failure in two industrial districts - Montebelluna in Italy and Northampton in Britain. In order to provide a better understanding of the factors underpinning the competitiveness of industrial districts, the research addresses three levels of analysis: the sector, the district and the firm. The research aim is to provide a theoretically integrated statement of network structure and a systematic analysis of the conditions that may lead to adaptive efficiency for the district as a whole.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER I INTRODUCTION

1.1 Overview

The present research addresses the theme of the viability of industrial districts in dealing with dramatic changes in their competitive environment. In particular, the multidisciplinary character of globalisation, meant as political, economical and social change that finds its roots in a changing geography, seems particularly significant for industrial districts, whose theoretical foundations rest on a delicate balance between these factors. In light of these changes, some observers express doubts about the viability of industrial districts as organisational forms of production that rely on strong networks developed over time and in geographical proximity (Amin & Thrift, 1994; Harrison, 1994; Harrison et. al., 1996; Berger & Locke, 2001; Nassimbeni, 2002; Guerrieri & Pietrobelli, 2000).

More precisely, the research seeks to assess the use of industrial districts as a viable organisational strategy for small manufacturing firms to compete globally. On the one hand, it is a common view that industrial districts have strongly contributed to the recent success of some national manufacturing systems (Piore & Sabel, 1984; Bull et. al., 1993; Best, 1990; Berger & Locke, 2001). On the other hand the recent poor performance experienced by some traditional manufacturing districts has been interpreted as evidence of the limitations of industrial districts in dealing with dramatic changes in their competitive environment (Rabellotti, 1997; Mundim et. al., 2000; Nassimbeni, 2002).

In particular, as increasingly diversified patterns of growth are emerging and different avenues are followed by industrial districts

to face globalisation, more attention should be paid to industrial districts' response to global competition. How global forces shape industrial districts in different ways? Since globalisation displays a complex and heterogeneous distributional pattern, unveiling its logics constitutes a primary concern.

From the extensive literature of industrial districts it emerges that there is a lack of consensus on the conceptual boundaries of their definitions: this lack of consensus on what constitutes a cluster or an industrial district has generated a terminological melting-pot which blurs the boundaries of the phenomena under investigation. Additionally, the existing literature indicates that we have still fairly limited understanding of their dynamics in relation to endogenous and exogenous causes of change.

Industrial districts tend to change over time, therefore attributing a crystallised set of attributes to these ever-changing agglomerative productive phenomena is of limited value. This research therefore endorses the view that it is more useful instead to focus on those attributes that find a wide consensus in the literature and that are likely to be present over time: the geographical concentration, sectoral specialisation and the presence of business networks. These are the "minimal requirements" that according to the literature underpin the network structure of *all* industrial districts. The implicit assumption is that socio-economic networks are not there *by definition* in all industrial districts, as remarked by Schmitz (1995) as well as by Giuliani (2005). Furthermore, focussing on these common set of criteria will allow us to classify industrial districts according to those structural features that may support them to face the "globalisation challenge".

Therefore, as well as providing a workable definition of industrial districts and a potential taxonomy, this research draws on the literature on network theories and theories of embeddedness, and attempts to introduce a more encompassing framework for investigation. Based both on a cross-national comparison and a mono-sectoral investigation the present research attempts to shed the light on the formulae or "recipes" for both success and decline in two well established industrial districts in Britain and Italy. In order to provide a more profound understanding of the factors underpinning the competitiveness of industrial districts, the respective network structure of Northampton (Britain) and Montebelluna (Italy) is compared. The aim is to provide a theoretically integrated statement of network structure and a systematic analysis of the conditions under which it may lead to adaptive efficiency for the district as a whole.

To this end, conceptualising the district network structure represents a useful starting point to address all the issues that have been partially developed or neglected by the literature of industrial districts (Lomi, 1991). A review of the literature of network theories shows that previous research defines two main categories of networks: business networks and socio-economic networks. Alternatively these two categories have been called inter-firm networks and the entrepreneur's personal networks, inter-organisational and social networks, formal and informal networks, calculative networks and identity-based networks (O'Donnell et. al., 2001; Hite & Hesterly, 2001; Johannisson, 1986). In general, business networks are considered at an aggregate level of analysis of the network structure (as organisational networks) while socio-economic networks are considered mostly in regard to the relational network of the entrepreneur (as personal networks). In this sense the network structure of the district is identified to a large extent in

terms of business networks, while the relational asset of the firm is often limited to the relational network of the entrepreneur. This clear-cut operationalisation of both the districts' network structure and the relational asset of the firm is however inadequate to faithfully portray the existing complex relationships amongst the district firms. Given that industrial districts tend to display a relatively heterogeneous fabric, made up of different sizes and at different stages of their development where entrepreneurship plays often a significant role, the relational asset of the firm is considered a relevant unit of analysis.

Overall, the literature on district networks is severely limited by this dualist approach – business networks as organisational networks *versus* socio-economic networks as personal networks – that does not allow us to capture the complexity that both the districts' network structure and the relational asset of the firm respectively encompass. The theory of embeddedness addresses this issue by introducing a useful analytical tool, *the relational asset of the firm* that encompasses *all* the relationships which small firms engage within the local community – from canonical business relationships traditionally characterised by the total or partial absence of social contents, to socio-economic relationships that are driven by social aims – that might as well affect organisational performances. In this sense, business networks and socio-economic networks (if any) are not looked at in isolation but through a joint assessment of their possible interaction.

For the purpose of this research, the relational asset of the firm is therefore defined as the composition of both business relationships and socio-economic relationships extending from, or converging on, the owner/manager (O'Donnell et. al., 2001). Within this context, by overcoming the twofold dichotomy existing between business

networks (organisational networks) and socio-economic networks (personal networks), the relational asset of the firm appears as a "new interpretative lens" to analyse the resilience of industrial districts to cope with the dramatic changes occurring in their competitive environment. Is the relational asset of the firm still a source of competitive advantage? The aim of the research is to provide a theoretically integrated statement of the relational asset of the firm and a systematic analysis of the conditions under which it may lead to competitive advantage for the single firm.

1.2 Rationale of the study

The enormous investment in time and effort committed during the last twenty years to understand and promote industrial districts has not led to the realisation of their full theoretical and practical potential (Staber, 2001). Conversely, the value of network theory to explain a wide range of organisational phenomena has been well documented by the literature. In particular, the opportunity of coupling network theories with the industrial district thesis as a viable option to produce fruitful insights about both network structure and the relational asset of the firm has been extensively discussed by the literature (Johannisson, 1995; Yeung, 2000; McDonald & Vertova, 2002; Hite & Hesterly, 2001).

However, besides the consensus that networks matter and beyond the widespread reference to strong networks as characteristic of successful industrial districts, many investigators are surprisingly unforthcoming about the conditions that are thought to provide adaptive efficiency to industrial districts and competitive advanage to their constituent firms. In particular, the paradox of embeddedness is theoretically indeterminate because it leaves open the possibilities of diverging outcomes (Uzzi, 1997; Staber, 2001).What is striking in the literature on industrial districts is the

absence of a theoretically integrated statement of network structure and a systematic analysis of the conditions under which network structures lead to adaptive efficiency. Common criticism of industrial districts research has been the lack of systematic empirical studies in order to assess propositions and assumptions that have been too often implicitly assumed as granted (Becattini, 2001; Paniccia, 1998). As such, there is an opportunity for applied, empirical research concerning the applicability of network theories to the industrial district thesis.

1.3 Objective of the research

In an attempt to fill the existing vacuum in the literature, the research addresses three different levels of analysis: the sector, the district and the firm. First, the sector is an influential level of analysis since it determines in large measure the necessary skills and status of industrial districts and therefore has important implications for their adaptive efficiency. Furthermore, different sectoral settings offer different ranges of opportunities to both industrial districts and their constituent firms. Globalisation clearly modifies the competitive environment of industrial districts, but also reshapes the borders of their networks, forcing industrial districts to rethink their strategic positioning in the global value chain.

Second, the district level of analysis is considered as industrial districts tend to respond in different ways to the dramatic changes in their competitive environment. In this context, identifying common patterns and possible trajectories is increasingly crucial. As increasingly diversified patterns are emerging and different avenues are followed by industrial districts, more attention should be devoted to industrial districts' response to global competition. In particular successful industrial districts have been usually described as richly joined and tightly woven, but systematic analysis of the

conditions under which certain network structures lead to adaptive efficiency are very rare.

Third, given the wider opportunities provided by industrial districts to small firms, it is important to understand small firms not only in respect of the strategic choices that they might implement collectively, but also according their individual patterns of action. By identifying possible patterns and correlations the research intends to formulate more encompassing assumptions on the relational asset that is thought to provide a competitive advantage to small firms in an era of globalisation. Although most published studies have considered one or two such levels and marginally acknowledge the impact of the others, this research endorses the assumption that different concomitant perspectives might realise a fuller understanding of these issues as well as providing new and otherwise inaccessible insights. Table 1.1 summarises the different levels of analysis with their respective research questions and research objectives.

Table 1.1: Levels of analysis, research questions and research objectives

Level of analysis	Research Question	Research Objective
Broad domain	How do industrial districts deal with their dramatic changes in their competitive environment?	To establish the resilience of industrial districts as organisational forms of production that rely on strong networks developed over time in geographical proximity in an era of globalisation.
The sector	Are industrial districts a viable strategy for small shoe manufacturing firms to compete globally?	To establish under what conditions a relatively traditional sector of industry can still survive and prosper in spite of global competition.
The industrial district	How do global forces shape industrial districts in different ways?	To provide a more profound understanding of the factors underpinning the economic dynamism of industrial districts.
The firm	Is the relational asset of the firm still a source of competitive advantage?	To provide a theoretically integrated statement of relational asset of the firm and a systematic analysis of the conditions under which it may lead to a competitive advantage for the single firm.

1.4 Significance of the research

Many scholars have devoted enormous amounts of time and effort to understand and promote those attributes that are thought necessary to create and sustain viable industrial districts. However, a closer reading of this literature reveals that there is a lack of consensus on the conceptual boundaries of their definition, which has generated a terminological melting-pot, blurring the boundaries of the phenomena under investigation. From the literature it also emerges that we have a fairly limited understanding of their

dynamics. This research attempts to address both these gaps by complementing the existing literature in several ways:

- First, at the district level of analysis an integrated statement of network structure is introduced in order to engage a more systematic analysis of the conditions under which network structures lead to adaptive efficiency for the district as a whole.
- Second, in a similar fashion but at the firm level of analysis, the research offers an integrated statement of the relational asset of the firm in order to engage a more systematic analysis of the conditions under which it may lead to competitive advantage for the single firms.
- Third, by conceptualising the district as the hyper-network made of the relational assets of its constituent firms the research wishes to provide a contribution to the recent debate on the synergy between social structure and economic action. In doing so, the research attempts to deliberate in favour of a more sustainable perspective of competitiveness since globalisation is increasingly eroding the traditional basis of competition enhancing those advantages that are linked to the property of renewable immaterial resource stocks.

1.5 The research process

The research endorses a deductive approach. Drawing on the methodological tradition dominating the research area, the research adopts a multiple-case study methodology, based both on a cross-comparative comparison and a mono-sectoral investigation. By adopting a network approach, the research was conducted on the basis of a questionnaire to guide data collection and analysis. The work also relies on different sources of evidence such as interviews

and secondary data. A process of triangulation was also adopted to match quantitative and qualitative data.

Given the complex nature of industrial districts, the case study approach is deemed as the best analytical tool. As described by Yin (1999) multiple-case design contains more than one single case of analysis in the same investigation, and thereby permits comparisons across cases. The evidence from multiple cases is often considered more compelling and the overall study is therefore regarded as being more robust.

In order to assess the resilience of industrial districts when dealing with dramatic changes in their competitive environment and more specifically the role that both network structure and the relational asset of the firm play in such a context, the comparison between two industrial districts – one in Italy (Montebelluna) and one in Britain (Northampton) - is extremely significant under various profiles. Additionally, both these districts display very different performance: the recent performance of Montebelluna stands in contrast to the overall performance of Northampton. This issue raises interesting questions and adds value to the opportunity of conducting a cross-national comparison between Italy and Britain.

The choice of the footwear sector also responds to its own rationale and can be justified on several grounds. First, in the footwear sector, firms tend to be more independent because of their craft heritage. Second, the footwear sector was chosen as exemplar of a "sunset" industry and a manufacturing sector with a particular history of European pre-eminence. Finally, the sector was chosen because it manifests a variety of production forms and possible trajectories to survival and growth in the face of globalisation.

The enquiry is organised in two steps: a first phase in which the investigation was based on a questionnaire distributed to shoe-manufacturers and on a number of open interviews to key informers; a second step in which more in-depth interviews and secondary data were undertaken. The objective of the former is to obtain sufficient information on the most interesting traits of both localities in order to identify significant issues to be scrutinised more closely through follow-up research. The latter phase is intended, via a mixture of semi-structured interviews and through the collection of relevant secondary data, to thoroughly examine the key issues emerging from the questionnaire and gain a deeper understanding of the relational asset of each firm. Data analysis is finally carried out as a mean of quantitative analysis (mainly descriptive statistics), qualitative analysis and triangulation.

1.6 Layout of the thesis

Chapter II sets out the background theme – the relevance of the debate on globalisation as a multifaceted phenomenon and its implications for industrial districts. In particular, the multidisciplinary character of globalisation, meant as a political, economical and social change that finds its roots in a changing geography, seems particularly significant for industrial districts, whose theoretical foundations rest on a delicate balance between these factors. In light of these changes, some observers express doubts about the viability of industrial districts as organisational forms of production that rely on strong networks developed over time and in geographical proximity.

Chapter III introduces the "core" of the literature review. The literature review has four objectives. First of all, the genesis of the industrial district thesis is described. In particular, since the seminal

work of Alfred Marshall (1920, 1930), scholars have placed different emphasis on the different attributes that industrial districts might posses. The aim of this part of the literature review is to define the conceptual boundaries of the industrial district definition. The section concludes with providing a "workable" definition of industrial district as it has been endorsed by the present research. Second, only recently have scholars began to question both the evolution of industrial districts over time as well as the implications of their external environment. In line with Garofoli's study (1989) the present research identifies two main foci on change processes – *endogenous change* and *exogenous change*. Third, network theories as well as theories of embeddedness are discussed in a survey of the field to provide some concepts that will inform the theoretical framework.

In light of these considerations to assess the viability of industrial districts, a more comprehensive theoretical framework is proposed in Chapter IV. As discussed in section 1.3, three levels of analysis will be developed: the sector, the district and the firm. Chapter V begins with setting the context for industrial district research. To this end, section 5.2 defines the methodological tradition dominating the research area and how the research relates to previous work. This will permit the justification of the underlying choices that inform the present work and provide the latter with its own methodological space. As far as research design is concerned, a multiple-case study design, based both on a cross-national comparison and a mono-sectoral investigation, has been chosen in order to carry out a detailed and comprehensive investigation of two industrial districts. These choices will be exhaustively discussed in section 5.3, section 5.4 Section 5.5 will concern data collection methods and give a brief outline of data analysis.

Chapter VI provides an overview of the international industrial context in which the two industrial districts under analysis are embedded. This chapter comprises six main sections: in section 6.2 the most salient global trends of the footwear sector are described, while section 6.3 deals with the responsiveness of the European footwear industry. This will lead on to the discussion of responses at national level in Italy and in Britain in section 6.4. The specific profiles of the footwear sector in relation to the industrial districts of Montebelluna and Northampton are discussed in sections 6.5, while section 6.6 will describe the differences in their industrial structure. In section 6.7, some preliminary conclusions are drawn. Overall, this chapter argues that the key features of the footwear sector are global competition, "dynamic volatility" and a progressive segmentation of the market: both large and small firms in different locations have to find successful ways to adapt to the implications of each of these sets of variables.

Chapter VII presents some of the results of the empirical investigation carried out in two footwear industrial districts: Montebelluna and Northampton. The respective network structure of both districts is compared in terms of linkages (backward, forward, horizontal linkages as well as linkages with other organisations) as well as competitive performance of their constituent firms. Finally, Chapter VIII deals with the actual comparison, the main findings and their implications, the limitations of the present research, its contributions as well it provides some suggestions for future research.

CHAPTER II BACKGROUND THEME: THE RELEVANCE OF THE DEBATE ON GLOBALISATION

2.1 Introduction

The notion of globalisation as a catalyst for radical economic, political and social change is a recurring issue in the current academic literature. There is however a lack of consensus on the strength and the likely impact of globalisation. This conceptual vacuum is nicely described by Scholte, who affirms that *'in spite of a deluge of publications on this subject, our analysis of globalisation tends to remain conceptually inexact, empirically thin, historically and culturally illiterate, normatively shallow and politically naïve. Although globalisation is widely assumed to be crucially important, we generally have a scant idea of what, more precisely, it entails'* (Scholte, 2000: 1).

There are three possible scenarios identified by the literature. According to one view, globalisation is totally a new phenomenon and its impetus is so overwhelming that the traditional pattern of capitalist accumulation and orthodox national approaches to political and economic governance are inadequate to deal with global market forces. States and firms have no other choice but to modify their tactical decisions to accommodate such extraordinary environmental change (Palan et. al., 1996). Advocates of this scenario present a vision of a globalised economy in which increasing flows of international trade as well as the activities that are set in place by multinational corporations (MNCs) create a tight web of international economic relationships (Ohmae, 1995; Giddens, 2000). Within this context, national and regional firms continually abandon their roots in

their original home base, transforming themselves into transnational firms roaming the globe and seeking to optimise the "strategic space" of the global economy. The underlying implication of this view is a remarkable shift of power from a system of nationally centred regulatory institutions (e.g. the nation-state) to an international system of supranational institutions and increasing deregulated forms of capitalism.

A second outlook is that globalisation is nothing new and the advocates of this scenario see globalisation as a "catchword" umbrella term that has been used by a wide range of pressure groups with an interest in promoting new business concepts and prescriptions to enhance competitiveness (Vellinga, 2000). Hirst and Thompson (1996) for example, compare the extent of internationalisation before 1914 and the level of internationalisation we reached in the 1990s in order to reject globalisation as a novelty. According to their study, the pre-World War I economy was more open and international in terms of Foreign Direct Investment (FDI) and financial flows. The quantitative evidence provided by Hirst and Thompson has been extensively criticised on several grounds (Radice 1998, 2000)[1].

According to a third vision, countervailing forces will offset any tendency toward globalisation (Radice, 1998; Rugman, 2000; Sudgen & Wilson 2001). This view is perhaps the most realistic and regards globalisation as a major new phenomenon influenced and influencing

[1] The strongest argument, that the quantitative extent of globalisation is no greater today then it was before 1914 according to some selected indicators such as the ratio of exports to GDP might be seen as relevant only if the thesis postulates an unbroken trend in such indicators (Radice, 1998).

by changes in manufacturing and in the financial sector. The advocates of this view, despite recognising the growing power of global capitalism, assume a very moderate outlook of the phenomenon. According to its advocates, the greater salience of global and transnational aspects of capital accumulation does not imply an irreversible undermining of the nation-state. It does, however call into question the adequacy of an "international" political system for ensuring the reproduction and accumulation of capital (Radice, 1998). According to Rugman (2000) for instance, we are witnessing the end of globalisation. The worldwide impact of the Asian financial crises in 1997, the riots in Seattle in December 1999, the emerging role of Non-Governmental Organisations (NGOs) and pressure groups, the fact the major MNCs are organised regionally and locally are all seen as symptoms of a visible defeat for free trade and globalisation. Overall, this view focuses in particular on the interplay between "global" and "local" forces such as international competitive pressure and local governance, and how "global" forces shape states, societies, geographical areas and industries in different ways (Sudgen & Wilson 2001). Rugman in particular places emphasis on the fact that globalisation is sector-related: in the manufacturing sector for instance, advances in technology intensify the concentration of economic power in the hand of MNCs. He claims that this increasing power does not so much lie in the creation of new knowledge, where smaller innovative firms can perform well, but in the application of this new knowledge to mass production (Rugman, 2000).

Despite regarding the extent and likely impact of globalisation differently, all three approaches identify a common feature – its multidisciplinary character as political, economic and socio-cultural

change that finds its roots in a changing geography (Sugden & Wilson, 2001). Globalisation as such, therefore requires a multidisciplinary approach since it can only be fully understood from a perspective that fuses several disciplines together.

A more thorough analysis of the different dimensions that globalisation encompasses will permit a better discussion the relevance of the debate on globalisation for the current research. More precisely, the significance of globalisation as a multifaceted phenomenon will be discussed in section 2.2; whereas the economic implications of globalisation as a background theme of the current research will be discussed in section 2.3, with the implications of globalisation for industrial districts will be discussed in relation to both the footwear sector and small firms in section 2.4. This discussion will pave the way to more thoroughly identify the broad domain of the research issue that the present research intends to address – the viability of industrial districts and their limitations in dealing with dramatic changes in their competitive environment. This issue will be thoroughly discussed in the concluding section 2.5, before introducing the "core" of the literature review that the present research draws upon in Chapter III.

2.2 Globalisation as a multifaceted phenomenon

On the multidisciplinary character of globalisation Radice notes that globalisation is *'a prominent topic among geographers and sociologists as well as economists and political scientists, and it is studied within every paradigm, from neoclassical economics to post-modern social theory to realist international relations theory to Marxism'* (Radice 2000: 6). Despite having colonised the intellectual imagination of the social sciences for over a decade, globalisation has been described in

many respects as an idea still in search of its own theory (McGrew, 2001).

Assuming a multidisciplinary approach to globalisation however does not imply that globalisation is reducible to several singular causal logics: on the contrary, it means to assume that globalisation is rather the product of the interplay of different dimensions. Each has contributed to the acceleration of the process of globalisation itself and these dimensions are themselves co-dependent - each is both effect and cause of the others. Therefore, globalisation can be broadly conceptualised as a multifaceted phenomenon which is *'simultaneously an effect and a cause'* (Scholte, 2000: 110). There are four main dimensions that are underlined by the literature as being most relevant for industrial districts. The next sections will briefly discuss the spatial, political and socio-cultural dimensions of globalisation, in order to lay out the background theme that is critically relevant for the present research - the economic dimension of globalisation and its implications for industrial districts.

2.2.1 The spatial dimension of globalisation

A common theme permeating the literature on globalisation is the changing significance of territoriality. There is a popular view that the world is moving toward a globalised economy, and that this implies that globalisation is inevitably associated with some "regionalism" in some form (Isaksen, 2001; Sudgen & Wilson, 2001).

According to a more strict geographical perspective, Brenner defines globalisation as *'a reterritorialisation of both socioeconomic and political-institutional spaces that unfolds simultaneously upon multiple, superimposed, geographical scale'* (Brenner, 1999: 432).

Supraterritoriality as argued by Scholte, is not reducible to a singular causal logic, such as capitalism or technology, but is the product of the dynamic interplay of rationalism, capitalism accumulation strategies, technological innovation and political regulation (Scholte, 2000).

Conversely, Scott affirms that *'contrary to many recent predictions, geography is not about to disappear. It becomes increasingly more important because globalisation enhances the possibility of heightened geographic differentiation and locational specialisation'* (Scott, 2001: 813). According to his perspective, as globalisation proceeds, an extended mosaic of city-regions is evidently coming into being and these particular agglomerations are now beginning to function as the spatial foundations of a "new world system"[2]. A similar scenario is described by Storper, who in his analysis of the resurgence of regional economies stresses the increasing importance of regional communities and firms as the basic building blocks of a global market, and also presents a strong case for looking at "regions" as important units of analysis (Storper, 1997). Regionalisation refers to economic activity dependent on resources that are specific to individual localities and the most unequivocal sign of this trend towards regionalisation is the visible growth of regional clusters over the last few decades.

Research on industrial clusters has grown enormously in recent years – industrial geographers and economists alike are increasingly concerned with unveiling the distributional logics that are respectively

[2] According to Scott, a new version of socio-spatial duality is coming into being: one that is global in its reach and meaning, but at the same expresses itself as a patchwork of highly individualised localities and places. Scott refers to these localities using the generic term of "region" meaning by which any geographical area of subnational extent (Scott, 1998).

associated with the socio-spatial organisation of industrial firms and their networks (Yeung, 2000). The term cluster can be traced back to Michael Porter's book *'The Competitive Advantage of Nations'* whose main argument is that the more geographically localised an industry is within a given nation, the more internationally competitive that particular industry is likely to be (Porter, 1990). Porter's identification of these contemporary local agglomerations of small firms, based on a large scale empirical analysis of the internationally competitive industries for several developed countries, has been very influential making the term "industrial cluster", a key concept in this field (Boekholt, 1997, Martin & Sunley, 2003)[3].

For Porter, the success of clusters in international markets is the primary barometer of the competitive strength of a nation and the success of any given firm can be traced back to four main factors: first the nature of the firm strategy, structure and rivalry in the country, including attitude toward competition, market institutions, the degree of local competition and other cultural and historical factors affecting business practices between firms, between firms and their workers, and between firms and institutions; second, there are factor conditions on which the firm seeks to compete; third, demand conditions or the

---

[3] As Boekholt notes *'the multitude of cluster initiatives has led to a widespread confusion of what clusters really are, and in what they differ from related phenomenon, such as industrial districts, technopoles, industrial networks and industry-research collaborations'* (Boekholt, 1997: 1). Despite such confusion not being clearly addressed by the literature, there is a general consensus that industrial clusters may be more or less geographically concentrated and interdependence between firms and local communities may be distance-sensitive to varying degrees. The broad and metaphorical nature of the concept is probably both its strength and weakness (Martin & Sunley, 2003; and many others).

nature of the local demand; and fourth, the presence of related and supporting industries, including suppliers and successful competitors. Thus, the success of an individual firm may be partly traced to the size, depth and nature of its cluster. There is no reason *a priori* to assume that clustering is likely to increase over time, even with economic growth and nominal increases in various elements of the cluster.

Locational and spatial factors lead to a trade-off between transport costs, size of the market and trade barriers. These geographical factors lead to a generation of proximity benefits as well as incentives to disperse. The advantages of spatial proximity are extensively investigated by the literature from Weber's '*Theory of the Location of Industries*' (1928) to more recent approaches. Space is therefore nested in the definition of clusters and reducing transport and transaction costs are generally regarded as the main benefits that geographical proximity encompasses (Yeung, 2000). This type of evolution appears to be dominant in many localities where the existence of factors such as a natural harbour or a navigable river leads to geographical concentration of firms engaged in activities that require low-cost transport systems. By accident, these firms discover the benefits of locating close to firms engaged in similar types of operations and a process of clustering spontaneously emerges (Krugman, 1996).The existence of favourable geographical conditions that are conducive to a good transport system and densely populated areas are however not sufficient conditions to generate industrial clusters. In this respect, geographical factors *per se* cannot be regarded as key features of clusters' creation and growth (Schmitz,

1992; Rabellotti, 1997). Historical events and institutional factors that are conducive to clustering provide the settings in which it is possible to reach proximity benefits.

Historical events strongly influence the formation of clusters. There are many examples of historical accidents leading to the development of clusters. Silicon Valley for example is perhaps the most well known example of a cluster that grew as a spin-off from a few electronic firms localised in that area in order to take advantage of the proximity of the aerospace industry and from a concentration of computer scientists in Stanford University (Saxenian, 1994). This process of self-organising clusters, arising from historical accidents, leading to firms locating in close proximity and discovering that this delivers economies of agglomeration, can lead to the quick growth of clusters.

Institutional factors are another important determinant of both cluster formation and development. Institutional frameworks affect the transaction costs of doing business by reducing uncertainty and providing incentive systems for finding solutions to conflict. Moreover, some institutional systems are thought to have different levels of adaptive efficiency that permit prompt and effective adjustment to dramatic changes in the market. The argument has focused on those aspects of the local economic system which yield enabling factors for business development activity. Issues of local competitiveness have been assessed in terms of the importance of local institutional factors in encouraging or impeding the development of self-boosting "regional milieux" and related virtuous circles of innovation (Amin & Thrift, 1994; Maillat, 1996). In a very similar way the literature concerned with innovation and technological development has placed a growing

emphasis on learning-by-interaction and regional systems of innovation (Freeman, 1995; Cooke & Morgan, 1994).

As the result of globalisation, industrial districts are following different paths, therefore comparing how industrial districts come into existence and sustain their competitiveness over time is important to assess their future viability. A more comprehensive discussion of this issue will be provided in Chapter VI when discussing the research settings, while its broader implications will be showed in Chapter VIII.

2.2.2 The political dimension of globalisation

The analysis of the political dimension of globalisation points the discussion towards two interrelated issues: the role of nation-states and the question of their institutional convergence. There are conflicting perspectives on whether global forces will cause convergence amongst nation-states towards a particular global model, or on the contrary, divergent national systems will rather persist. According to the advocates of the first perspective, convergence is inevitable as unfettered competition forces firms and nation-states alike to conform to globalisation by abandoning their deeply rooted cultural traditions and their distinctive social practices (Radice, 1998). This vision assumes that greater power lies with global forces, which will force nation-states to converge on one institutional system and individual firms to adhere to best practices to maintain their competitiveness. The case for institutional convergence rests on two central propositions: first, that globalisation involves a real change in the structures and functioning of current institutional frameworks; and second, that as a result of these profound changes national differences in institutions and practices are being eroded (Radice, 2000).

An opposing perspective is that globalisation will lead not to the homogenisation of national differences but to a reconfiguration that will feature elements of both convergence and divergence (Palan et. al., 1996). In particular, institutional convergence is not seen as an automatic and predetermined outcome because emulation of best practices and the adoption of a particular institutional framework cannot easily be detached from their national context without undergoing major modifications.

Despite the disagreement over the role of nation-states and the extent of their institutional convergence in today's globalisation process, there is common view that within globalisation, regionalisation of some sort becomes increasingly crucial (Sudgen & Wilson, 2001). This approach particularly centres on the dualism between "local" (national, regional and local) and "global" indeed the term "glocalisation" is often used to refer to the co-existence of "globalisation" and "localisation". Within the political analysis of globalisation, the main concern is regarding governance. In this perspective, both locality and community are seen as important units of analysis as it from them that participation in governance is built. While many authors debate over the roles of nations, regions and cities, Sudgen and Wilson (2001) emphasise the notion of "locality".

According to these authors, knowledge and learning are key elements behind the ability to respond to the changes that are occurring with globalisation. A primary concern of this outlook is with bridging knowledge gaps so that localities are enabled to compete on a level playing field. Knowledge and learning are in this perspective crucial to development, realising both localities and communities their potential.

Within localities, knowledge is symmetrically seen as crucial for the democratisation of the decision-making process as it enables people to fully participate in the governance of their locality and to become involved in both the formal and informal networks that lead to governance of firms and institutions (Sudgen & Wilson, 2001). In this vision, governance is crucial to the way in which people respond to globalisation as it determines whether globalisation can be harnessed to foster prosperity of a locality, defined by the locality itself ("democratic globalisation") or whether globalisation is geared solely towards serving elite or external interests ("elite globalisation").

Since as the result of globalisation industrial districts are following different venues comparing how different forms of governance are developed is important to assess their viability. A more comprehensive discussion of this issue will be provided in Chapter III when discussing industrial districts' dynamics; its significance will be discussed in Chapter VI when describing the research settings, while its broader implications will be shown in Chapter VIII.

2.2.3 The socio-cultural dimension of globalisation

According to the sociologist Robertson, globalisation refers *'both to the compression of the world and the intensification of consciousness of the world as a whole'* (Robertson, 1992: 36). Equally we can expect relationships between people in disparate locations to be formed as easily as relationships between people in proximate ones (Waters, 1995). Scholte (2000) for example, stresses the growing importance of relations that transcend geographical borders. He argues that globalisation is a new distinctive phenomenon only when it is conceptualised in terms of "deterritorialisation". In particular, the proliferation and spread of supraterritorial connections brings an end

to what could be called "territorialism" – a situation where social geography is entirely territorial.

The importance of relations that transcend geographical borders is also associated with recognition of recent advances in transport, information and communication technologies as these advances have markedly overcame previous difficulties inherent in interaction over large distances. The advent of a wide range of new technologies has lowered the costs of long-distance transport and telecommunication services, enabling cheaper and almost instantaneous transfers of vast amount of information across the world and it creates potential for a new "layer" of market and non-market activities that can be detached from physical localities (Sudgen & Wilson, 2001).

Similarly Waters observes *'in a globalised word...territoriality will disappear as an organising principle for social and cultural life; it will be a society without borders and spatial boundaries. In a globalised world we will be unable to predict social practices and preferences on the basis of geographical location. Equally we can expect relationships between people in disparate locations to be formed as easily as relationships between people in proximate ones'* (Waters, 1995: 45).

Overall, the importance of relations that transcend geographical distance has profound implications for industrial districts where economic life seems to be to some extent intertwined with social relationships. A more thorough discussion of the emphasis placed on geographical proximity will be provided in Chapter III. Its significance to this research will be discussed in Chapter VI when discussing the research settings, while its practical implications will be shown in

Chapter VII when discussing the empirical evidence as well as its broader implications will be discussed in Chapter VIII.

2.3 The economic dimension of globalisation as a background theme of the current research

Globalisation in an economic perspective is used as an umbrella term referring to the erosion of barriers to international flows of goods, finance and know-how (Schmitz, 1998). As globalisation displays a complex and heterogeneous distributional pattern, unveiling its logics is a crucial theme within the literature. For most of the world's population, the increasing integration of the global economy has provided opportunities for significant income growth as well as a better standard of living. At the same time, however there has also been a growing incidence of inequality within and between countries. These positive and negative effects of globalisation have been experienced at different levels – inequality affects countries, sectors, regions, towns, firms, households as well as individuals. A wide range of factors are taken into consideration by the literature in its ambitious attempt to identify the "winners" and the "losers" of globalisation.

At macro-level, the debate mainly focuses on the different new institutional approaches looking at models of capitalism, their potential to deal with inequalities and the redistributive ethics on which they rely on. Opposing views see national governments, industrial associations, individual firms, trade unions, consumers and employees merely reacting passively to the overwhelming forces of global capitalism (Radice, 1998), whilst others acknowledge that there is still a fair interplay between them (Hertz, 2001). Debates over whether industrialised societies are converging toward a particular form of capitalism have permeated many branches of social science since the

1960s. Comparative studies of national models of capitalism have emerged across a wide range of disciplines, including geography, sociology, politics and economics. More recently, Michael Albert's *'Capitalism vs. Capitalism'* (1991) in drawing sketches of "Anglo-American" and "Nippo-Rhenish" models, has launched the debate over the societal foundations of economic performance.

By linking institutional theory to transaction cost economics, new institutional economics attempts to provide an explanation as to how different institutional frameworks may affect the cost of undertaking economic activities (North, 1990). The common intuition underlying the "varieties of capitalism" literature is that economic performance is a characteristic of firms meant not as autonomous actors but as social creations, highly dependent on the external societal resources. Firms in the same sector, with the availability of similar technology and products will differ systematically across societies according to the kinds of resources and institutional frameworks that those societies provide for them. In this perspective, different kind of industrial societies, different institutional configurations or forms of production generate systematically different outcomes to the extent that it is possible to deduce a theory of comparative institutional advantage (Berger & Locke, 2001).

Alongside focussing on redistributive patterns amongst countries, another important theme of inequality that has been extensively discussed by the literature is the emergence of a global market, which is increasingly governed by MNCs at the expense of domestic firms. Due to the increasing integration of economic activities, domestic firms find themselves more exposed to competitive pressure from MNCs and

firms from other countries. Furthermore, deregulation and technological development increase international competition by creating the same opportunities to both domestic and foreign firms. These lower barriers to entry as well as the greater homogeneity of consumer tastes and attitudes worldwide are driving MNCs to become more and more committed to "global strategic management" (Lasserre, 2003)[4]. In part this takes place through MNCs establishing or buying firms in domestic markets and in part through linking independent firms to MNCs as subcontractors and suppliers (Rugman, 2000; Isaksen, 2001).

Globalisation in this context is described by the literature as a "double edged sword" for domestic firms - as globalisation increasingly

[4] The view that multinational corporations are increasingly becoming rootless, roaming across the globe in the search of their "strategic market" and therefore constitute a threat for domestic firms is quite controversial. From one side, we have Ohmae's model of a dominant triad for example, that visualises how competitive, regulatory and market pressures impact on firms in dynamic high technology markets (Ohmae, 1995). From this study, the increasingly high accountability of Western Europe, North America and South-East Asia in terms of international trade and foreign direct investments arose from supposedly changing environmental scenarios. The model was constructed to show how increasing tariff barriers, converging consumer tastes, the need to achieve economies of scale and to cope with increasing costs of investment in technology might lead to the strategic promotion of standardised marketing programmes and a higher concentration of commercial activity within the triad. This would seem to point to a process of localisation rather than globalisation. On the other hand, there is the undeniable evidence provided by the widespread adoption of the Japanese manufacturing process and management strategies such as Total Quality Management and Just in Time practices, that are often elevated to status of universality despite cultural, historical and institutional factors which seems to point to an opposite trend.

exposes domestic firms to the threat of being incorporated by global commodity chains, it also offers opportunities for domestic firms for industrial upgrading as modern theories of FDI suggest. In the early 1960s, Vernon proposed the theory of *'The International Product Life Cycle'* (1966) to explain how product innovation and production could migrate from the country of origin of the innovative firms to other country subsidiaries. In spite of its simplicity and appeal, the theory failed to explain the globalisation of innovation that took place after the 1960s to the extent that today there is no difference in terms of technology between United States, Europe and Japan (Vernon, 1979).

Modern theories of FDI, focussing on spillover effects, technological and geographical factors, provide a clearer understanding of some of the reasons for regional performance. Some studies suggest that FDI leads to spillover benefits that improve the general level of productivity of the host economy (Blomstrom and Kokko, 1998). Spillover benefits to domestic firms and industries from FDI activities arise from the "emulation effect" and the transfer of knowledge to domestic suppliers and other supporting firms and organisations connected to foreign subsidiaries. Rugman for example describes the role of the "flagship firm" – a MNC operating at the hub of an extensive industrial cluster (Rugman, 2000; Rugman & D'Cruz, 2000). According to this vision, spillover effects are more likely to occur in regions that have a high capacity to assimilate technology transfer that is embodied in FDI flows (Lasserre, 2003). Beneficial spillover effects often generate a "virtuous circle" by which they create desirable conditions in regions that encourage more investments to take advantage of the enhanced productivity potential. This issue of spillover effects is particularly relevant for the present research – a

more exhaustive overview of the literature on modern theories of FDI will be provided in the next chapter, section 3.3.3.

The economic literature on globalisation has also placed a strong emphasis on industrial clustering. The relevance of clustering for competing in global markets has received increasing attention over recent years. Yet, the research agenda is concerned with understanding what distinguishes successful clusters from failing ones (Schmitz, 1998). Scott predicts that this concern will accelerate further as the globalisation of product markets intensifies (Scott, 2001).

These considerations, such as the different degrees to which different localities are more or less proactive towards globalisation (by engaging in different patterns of interaction with MNCs and foreign firms and by experiencing different spillover effects) are very important for industrial districts. The importance of assessing such patterns will be more thoroughly discussed in Chapter III and their implications for industrial districts will be shown in Chapter VI when discussing the research settings while their broader implications for the "globalisation challenge" will be discussed in Chapter VIII.

2.4 Globalisation and its implications for industrial districts

The current research addresses the issue of globalisation, meant primarily as an economic phenomenon, and in particular how increasing competition and FDI poses serious challenges for both the manufacturing sector - the footwear sector in particular and, to a larger extent, for industrial districts and their constituent firms. So why is globalisation - intended as political, economic and socio-cultural

change that finds its roots in a changing geography - relevant for industrial districts? Despite the increasing evidence of clusters' reorganisation in response to a very fast-changing environment, little attention has been paid by the literature to the transformation of industrial districts.

Although the terms "cluster" and "industrial district" are often used as interchangeable concepts by the literature, they are used throughout this thesis to describe two distinct, although related, phenomena[5]. Clusters have two defining features, namely geographical concentration and sectoral specialisation and they can be defined as *'a group of producers making similar things in close vicinity to each other'* (Schmitz, 1982: 435). Industrial districts are geographical concentrations of firms and supporting institutions producing the same or similar products but which are underpinned by strong networks that confer benefits to the participants in the districts (McDonald & Vertova, 2002). It is because of the peculiar nature of these strong networks that they represent a particularly interesting focus for further investigation.

In the past, the enthusiasm generated by the successful experience of industrial districts in both industrialised and industrialising countries has induced social scientists and practitioners alike to believe in the existence of a clearly defined model. An incredible number of definitions of industrial districts have been provided by the literature. Despite different definitions tending to emphasise different features, it

[5] A more thorough articulation of the distinction between clusters and industrial districts will be provided in Chapter III, section 3.2.4, when dealing with the literature on local industrial agglomerations and their taxonomy.

is possible to identify some key themes in order to preliminarily discuss why globalisation represents a challenge for industrial districts. The "ideal-type" of industrial district for instance, as it has been described by Rabellotti (1997) in her study on assessing the adequacy of the industrial district thesis for analysing clusters of firms in developing countries, stresses the distinctiveness of industrial districts along four main key features: location and spatial factors; institutional and policy factors; socio-cultural factors and economic and organisational factors.

First, location and spatial factors lead to a trade-off between transport costs, size of the market and trade barriers. These geographical factors lead to a generation of proximity benefits as well as incentives to disperse. The advantages of spatial proximity are extensively investigated by the literature from Marshall's original formulation of the industrial district thesis to its most recent developments. Industrial districts are defined as a socio-territorial entity as well as an economic construct (Becattini, 1990; Bellandi, 1989). Space is therefore nested in the definition of the district and geographical proximity is always associated with sectoral specialisation. Reducing transport and transaction costs and favouring the circulation of information and face-to-face contacts are generally regarded as the main benefits that geographical proximity encompasses (Rabellotti, 1997; Yeung, 2000). Another of the spatial characteristics of industrial districts is their small urban dimension (Bagnasco, 1988).

Second, institutional and policy factors, including a network of public and private local institutions supporting economic agents has been commonly acknowledged as one of the main feature characterising

industrial districts (Rabellotti, 1997; Schmitz, 2000; Yeung, 2000). However, the literature seems divided on whether industrial districts may be considered the result of a planned action and whether institutional intervention can play a role in the consolidation of the districts' growth (Rabellotti, 1997). According to Amin and Thrift (1994) for instance, "institutional thickness" helps to embed firms in specific localities and to reduce their tendencies for relocation. Similarly, Yeung (2000) contends that a strong institutional presence lowers the risk of "hollowing out" as a result of environmental transformations that globalisation encompasses as well as inducing new firms formation and growth, and it further enhances the competitiveness of existing firms. Rabellotti emphasises how industrial districts cannot be created *ex novo* as a result of policy intervention, however when a critical mass of specialised and geographically concentrated firms exists, a strong institutional presence can play a role in supporting industrial growth and innovation (Rabellotti, 1997). Nonetheless, too much "institutional thickness" is not necessarily beneficial for localised firms (Yeung, 2000). Scott for instance argued that '*not all forms of institutional thickness provide an automatic guarantee of economic dynamism*' (Scott, 1998:110).

Despite the difficulties in systematically assessing the effective role played by public and private institutions in industrial districts, some generalisations can be made from some of the successful experiences. The role of public policy in the Italian and other European districts has received huge attention by the literature. Particular emphasis has been devoted to the role of regional and local governments in providing a framework in which industrial districts can flourish and be nurtured (Brusco, 1990; Best, 1990). There is some evidence, for example, that

the growth of the Italian districts benefited from a national regulatory framework which provides financial facilities and exemptions from administrative burdens for artisans (Rabellotti, 1997). Consistently, the literature also accords a key role to a particular set of private institutions such as business associations, trade organisations and chambers of commerce. These private sector institutions have both the potential and the capacity to promote a sense of shared group identity and to strengthen the voice of local firms (Yeung, 2000). In many cases entrepreneurial associations and other institutions such as business service centres have also played a significant role in the provision of services. Example of services provided are the supply of information, quality control and testing facilities, entrepreneurial and managerial training, translation of tenders, consultancy on fiscal and legal matters, book-keeping and research on foreign markets (Pike, 1992). Most importantly, the institutional presence seemed to have the capacity to upgrade districts' production along the ever-fast pace of innovation and increasing competition, driving the districts forward (Kaplinsky, 2000; Schmitz, 2000). Overall, a tight collaboration between public and private bodies in the definition of firms' needs and in the implementation of the institutional initiatives has been crucial in determining their degree of success (Rabellotti, 1997; Schmitz, 2000).

Third, a strong relatively homogeneous, socio-cultural background linking the economic agents and establishing a universally accepted behavioural code is increasingly emphasised as a crucial factor in determining viability and success of industrial districts (Yeung, 2000). Historical events have also strongly influenced the clustering process. There are many examples of historical accidents leading to development of industrial districts. Historical accidents often lead to

the beginnings of economic activity that flourish and develop as the result of favourable geographical conditions. Socio-economic relationships comprising both the personal network which the small firm owner has with specific individuals and the wider "embeddedness" of the business within a shared community culture reduce transaction costs, foster that "particular mix of competition and cooperation" by building a collective identity as well as proving learning opportunities (Becattini, 1990; Uzzi, 1997; Schmitz, 2000; Lorenzen, 1999). The existence of an efficient system of face-to-face relationships between economic actors facilitates the circulation of information and enables the widespread diffusion of innovation across the industrial district. The existence of a common social background further acts as a buffer reconciling the conflicting relations between capital and labour and creating a high social mobility, making it possible to easily move from one job to another (Rabellotti, 1997; Paniccia, 1998). In industrial districts, economic relations tend to be intertwined with social relations and economic behaviour is likely to be at least in part shaped by social norms (Rabellotti, 1997; MacDonald & Vertova, 2002).

Fourth, economic and organisational factors consist of an intense set of backward, forward, horizontal market linkages and non-market exchange of goods, services, information and people (Rabellotti, 1997). Economic and organisational factors are extensively investigated by the literature. According to Garofoli (1982), an outstanding productive specialisation at local level contributes significantly to total national and sometimes international production. Becattini particularly stresses the importance of a high level of division of labour between firms *'which is neither diluted in the general market, nor concentrated in just a few firms'* (Becattini, 1990:40).

Furthermore, the existence of a large number of small and medium sized enterprises, without a leading or dominant firm characterising inter-firm relationships, establishes a balance between competition and cooperation (Becattini, 1990; Brusco 1990). Competition occurs horizontally among firms that are specialised in the same product or in the same activity and it generally stems from quality, design, choice, speed and flexibility of adjustment (Pyke & Serenberger, 1992). Cooperation concerns the relationships between firms, their subcontractors and their suppliers and can be fostered by local institutions (Rabellotti, 1997). The availability of specialised workers also contributes to create a strong but dynamic knowledge base from which firms can rely on (Becattini, 1990). The existence of an efficient system of face-to-face relationships between economic actors further facilitates the circulation of information about technology, market, suppliers and components, significantly reducing transaction costs.

If in the past years, increasing attention has been dedicated to describing the reasons for the success of industrial districts, some districts have recently attracted attention because of their poor performance. In particular, poor performance experienced by some traditional manufacturing districts has been interpreted as evidence of the strong limits that the industrial districts face in dealing with dramatic changes in their competitive environment (Mundim et. al., 2000). Many observers contend that the ideal-type previously described is rapidly becoming obsolete and inadequate to represent contemporary reality. Globalisation has in fact created profound changes in industrial districts. Recent trends in the major manufacturing systems show a strong evolution in those features (location and spatial factors, institutional and policy factors, economic

and organisational factors, socio-cultural factors) that historically contributed to the success of industrial districts (Rabellotti, 1997).

Considering the spatial dimension of globalisation, are industrial districts still playing a role or are they destined to fade away? As Nassimbeni contends, no unequivocal answer can be found in the literature (Nassimbeni, 2002). This issue is crucial, especially for countries like Italy where industrial districts have been and still are a crucial part of the industrial system, and therefore requires a more exhaustive debate. In particular, two levels of analysis seem to be intertwined when assessing the viability of industrial districts:

- At the sector level of analysis, as the result of increasing competition and FDI, the historically outstanding performance of the European manufacturing industry can no longer be taken for granted. This is particularly visible in the footwear sector, where due to the severe competition from newly industrialised countries, producers now face competition across the full spectrum of demand and not only in relation to cheap and inferior imports. This will be discussed in more detail in section 2.4.1.

- At the firm level of analysis, while globalisation significantly affects small manufacturing firms, posing new threats, it also exposes them to new business opportunities. The literature on internationalisation of small firms broadly identifies three main strategies by which they can compete globally: a) directly challenging large firms; b) being part of an international supply chain; c) being partner of a virtual network. The discussion of

these distinct but not mutually exclusive strategies in turn will permit the introduction of the broad research issue that the current research intends to address - the viability of industrial districts in dealing with dramatic changes in their competitive environment. 2.4.2.

2.4.1 Implications for manufacturing and the footwear sector

Changing business environments promotes great uncertainty in respect of future outcomes and possibilities. Since the 1950s in Europe rising standards of living have been traditionally associated with a well-established and economically viable manufacturing base (Bull et. al., 1993). But the historically outstanding performance of European industries can no longer be taken for granted as the recent experiences of new industrialised countries seems to prove (Rabellotti, 2003).

This has followed a well-defined pattern of economic development: an emerging economy seeks to take advantage of its low-cost physical and human capital by attracting inward investments. Labour intensive manufacturing sectors, such as footwear, are often regarded as an ideal vehicle for industrialisation. Subsidies and other forms of state aids commonly reinforce this process. Europe and the US are obvious targets for exports from newly industrialised countries, as China and Brazil have demonstrated over the past decade. This example however shows how long-term competitiveness cannot be sustained merely by producing cheap and inferior goods. Over time the quality and the specification of imported footwear have risen inexorably, so that European producers now face competition across the full spectrum of demand. As a recent report of the European Commission indicates, the

European footwear industry has started modernising and restructuring in the face of mounting pressure of international competition and the advent of new technologies (European Commission, 2001). As a result of the increasing competition from new industrialised countries, the European manufacturers have turned more to high-quality products which are more diversified and offer greater value.

This climate of profound transformations has inexorably driven many European firms out of the market, despite the defensive intent of the EU maintaining autonomous quantitative restrictions on a number of footwear articles of Chinese origin. Although some producers have decided to stand their ground and compete, official statistics show that the European footwear sector is steadily losing ground, as measured by shares of world trade (European Commission, 2001). Some observers argue that this trend was quite predictable, as Europe's industrial future is more likely to stem from advanced technologies, telecommunications and by extension, increasingly from the service industries as opposed to manufacturing.

Either way, the importance of the manufacturing sector and its ability to sustain employment and generate wealth should not be underestimated. More precisely, the successful experience of the manufacturing sector in some European countries seems to prove that relatively traditional sectors of the industry can still survive and prosper in advanced, high-wage economies, in spite of the increasing global competition (Bull et. al., 1993; Lasserre, 2003). Furthermore, the European footwear sector employs more than 228,000 people directly. The sector, which is highly labour-intensive, allows the active participation of all working age people to be maximised, by offering

jobs to women and those with manual skills and by giving chances of access to employment to less-qualified workers (European Commission, 2001). Since the sector plays a significant role in terms of social inclusion, forecasting its future development becomes increasingly crucial. The geographical concentration of the sector, its highly labour-intensive nature and its considerable price-sensitivity towards low-price imports produce a situation in which the slightest fluctuation in the level of economic activities is likely to have major regional and social repercussions.

2.4.2 Implications for small firms

The growing involvement of small firms in global competition is one of the most important aspects of the recent era of globalisation (Mariotti & Piscitello, 2001). Challenging global markets pose the issue of how to cope with local and international competitors. The economic view of globalisation implies that in a highly integrated global market, small firms suffer from a twofold problem: on the one hand, they suffer from asset constrains and limitations in critical resources that restrict their capability to compete in a global environment; on the other hand, local market and niches are increasingly being attacked by multinational corporations. If the capability to compete globally is size related, there is the need to identify how small firm can compete against larger firms in the global market. In particular, there is the need to identify the global-business opportunities that might be better exploited by small firms (Mundim et. al., 2000).

Globalisation is a source of opportunities as well as threats. Specific advantages derived from operating in a global market seem to be exploitable only by large firms unless small firms can find

organisational solutions allowing them to better cope with global business opportunities. However, while some business opportunities might be better exploited by large firms, there are also business opportunities that large firms find too complex, or too risky to exploit.

A firm operating in a global market can take advantage of four main benefits vis-à-vis competitors operating in the local market. A first benefit is represented by economies of scale. Scale and scope economies are the most obvious benefits deriving from an increased demand. A second benefit may be the exploitation of lower input costs as differential resources/prices might be better exploited in an international supply-chain that can permit to optimise their cost/utility ratio. A third benefit is the reduction of risk deriving from cyclical downturns because a broader portfolio of world-wide activities is less risky than one concentrated in fewer markets. A fourth and final benefit deriving from engaging global operations is that it allows the exploitation of market segmentation and increasing marginal revenues coming from differentiation.

But to what extent are these benefits available to small firms? Mundim et. al. (2000) address this question, explaining how competing globally has some implications that imply strong asymmetries related to firms size - the possibility to exploit benefits deriving from globalisation is therefore "size-dependent". The literature on the internationalisation of small firms, however, broadly identifies several strategies by which small firms can compete globally: directly challenging large firms, being part of an international supply chain and being a partner of a virtual network.

a) Directly challenging large firms

Both Campbell & Luchs (1997) and Porter (1990) suggest that small firms should concentrate upon a specialisation/niche strategy. However, the risk for small firms to concentrate on specific niches is evident since globalisation makes it easier for larger firms to penetrate niches. Furthermore, global firms can serve a very small niche in one country along with several other niches in the rest of the world reaching visible benefits of economies of scale. It is doubtful that small firms working locally in such niche can overcome the cost difference between them and the larger ones. Moreover, while small firms can generally successfully exploit their recognised flexibility in overcoming cyclical downturns when compared with larger competitors, the same strategy is ineffective against global firms operating in the same niche (Mundim et. al., 2000). Global firms can in fact counterbalance poor performance in one particular local market with better performance somewhere else.

b) Being part of an international supply chain

Another option available for small firms is to play a role in the extended international supply chain (Rugman, 2000; Rugman & D'Cruz, 2000; Isaksen, 2001). This opportunity may occur since larger firms may be interested in using local suppliers. This trend is particularly visible in the automotive sector for example, where corporations such as Ford, GM, Fiat and Toyota have made extensive use of partnerships with second or lower tiers of local suppliers. In order to contain the higher risks associated with FDI, these large firms have outsourced all the production stages that are considered as not crucially strategic, not very valuable or too risky to be internalised. Through this outsourcing policy, partnerships with larger firms can

offer small firms the chance to grow or to enter new markets where the leading partners have already a well established supply chain (Mundim et. al., 2000).

On the other hand, environmental volatility and complexity makes integration more risky and more costly to be sustained, because competitors are more likely to use price-cutting to minimise overcapacities. As a result, multinational firms will produce less in-house and will rely more on external partners, thus shifting some of the risk of adjustment onto other firms (Staber, 1997). In this case, the main reason that drives a multinational firm to externalise phases of production is the acknowledgment that direct investment in that particular phase would be too inconvenient or too risky. Especially if the partnership involves strategy dependence, little innovation and an inadequate development of competences, small firms may be exposed to the risk of losing connections to the higher value-added rings of the chain (Mundim et. al., 2000). Previous research suggests that in order to be part of the chain, small producers may even accept a functional downgrading, abandoning the most profitable rings of the chain, to focus only on production (Rabellotti, 2003). Other researchers point out how the gradual progressive transformation in the relationship between large manufacturers and small suppliers – the evolution from a type of subordination towards a pattern of partnership – is only possible if the small firm makes sufficient improvement in terms of performance (De Toni et. al., 1995).

c) Being a partner of a virtual network

Another option suggests how a network of small firms can produce on a global scale without investing directly in operations in foreign

countries. If the cooperation takes place through information systems between firms that are geographically spread across distant localities, then this kind of organisation is commonly defined as a "virtual enterprise" (Mundim et. al., 2000).

Networks of small firms successfully competing in the global market already exist in the footwear sector in European countries such as Denmark, France, Germany, Greece and United Kingdom (European Commission, 2001). Such networks enable firms to explore business opportunities and experiment in using the new information technologies. They offer the possibility to improve the interaction between producers and distributors as they can be used to exchange purchase orders, invoices, transport documents and bank transfer documents, reducing distribution and stock management costs. But overall, in spite of the numerous benefits that these kinds of networks encompass, it should be noted how most small firms have neither the know-how nor the resources to set up or permanently change their own systems to suit potential partners (De Toni et. al., 1995).

2.5 Conclusions

Drawing on the previous work of Nassimbeni (2002), Mundim et. al. (2000) and Bull et. al. (1993), the current research addresses the broad issue of industrial districts as a viable organisational strategy for small manufacturing firms to compete globally. It is a common view that industrial districts have strongly contributed to the recent success of some European national manufacturing systems. As previous research has extensively pointed out, industrial districts have developed a whole revolutionary paradigm with regard to mass production.

Thirty years ago, industrial districts were proposed as an autonomous category in the field of industrial economics and as an analytic unit for investigating contemporary local economic development. In an intellectual and policymaking landscape, dominated by theories that conceived large-scale mass production of standardised commodities for large homogeneous markets as the micro-foundations of economic productivity and growth, the "discovery" of the industrial districts aroused extraordinary attention. The districts excited the interest of social scientists and policymakers because they seemed to demonstrate the viability of alternative models of economic success.

Additionally, industrial districts appeared as an important phenomenon, not only because they showed that small firms could survive in a world of rapid technological change and growing international competition; but also because they were especially versatile in achieving what large-scale Fordist industries could not achieve – satisfying rapidly changing demand in affluent societies for more diverse and higher quality goods. Because of the economic dynamism these districts have displayed, they have been analysed and celebrated in a wide-ranging literature which portrays them as prototypes of "flexible specialisation" (Piore & Sabel, 1984) "the new competition" (Best, 1990), exemplars of "best practice" in today's post-Fordist world of segmented demand (Berger & Locke, 2001). In this sense, the discovery of industrial districts systems was important because it changed the understanding of how modern economies were evolving and what options were available for achieving competitive advantage.

Today, the same conceptualisation continues to serve as a framework for understanding economic and social interaction (Lazerson & Lorenzoni, 1999) and the more general interest in industrial districts no longer lies in the evidence provided about viable alternatives to economic development. Rather the question is whether such organisational solutions, embedded in strong networks, developed over time and in geographical proximity, might still constitute a competitive advantage in an era of globalisation (Berger & Locke, 2001).

The multifaceted nature of globalisation poses several questions on the future viability of industrial districts. Drawing on the literature of globalisation, four key dimensions seem likely to be affecting industrial districts and their future viability. First, since the industrial district has been defined as an organisational form of production made of strong networks where geographical proximity is always associated with sectoral specialisation, the changing significance of territoriality that globalisation entails is likely to have an impact on industrial districts' competitiveness. Due to globalisation, economic activity is perceived as increasingly placeless and deterritorialised. This transition is increasingly seen as one important outcome of globalisation and consistently is likely to have some important consequences for the organisation and localisation of industrial districts and to a larger extent, for their constituent firms.

Second, the political dimension of globalisation addresses the issue of governance in industrial districts where both locality and community are seen as important units of analysis because it is from them that participation in governance develops. Governance therefore poses a

serious challenge for districts' institutional thickness by broadening the area of maneuver of both public and private institutions, who not only have to provide a framework in which industrial districts can flourish and be nurtured, but also have to shape such a framework to reach a democratic outcome.

Third, the socio-cultural dimension of globalisation is also likely to pose threats and opportunities for industrial districts and their constituent firms. The increasing importance of relationships that transcend geographical borders, associated with recent advances in transport, information and communication technology, is likely to have an impact on industrial districts. Since some industrial districts are characterised by the presence of socio-economic networks, the advent of a wide range of new technology that has lowered the costs of transfers of vast amount of information across the world creates potential for a new layer of market and non-market activities that can be detached from physical localities. Furthermore as industrial districts rely on a shared culture, which in turn informs both social and business networks, the increasing number of opportunities of engaging in social relationships as the result of the outgoing process of globalisation is likely to have implications for industrial districts' network structures.

Finally, economic globalisation refers to the shift of the world economy towards an increasingly supranational integration coordinated by transnational corporations. In part, this takes place through corporations establishing or buying firms in different areas of the world, and in part through the linking of formally independent firms to MNCs as subcontractors and suppliers. The underlying assumption of many contemporary analyses of globalisation is that globalisation is a

double edged sword for both industrial districts and their constituent firms providing both threats and opportunities. The following table summarises the key-dimensions of globalisation and the "ideal-type" of industrial district described by Rabellotti (1997), underlying the questions associated with the viability of industrial districts.

Table 2.1: Globalisation and its relevance for industrial districts

Globalisation Key-dimensions	**The "ideal type" of industrial district (Rabellotti, 1997)**	**The viability of industrial districts - issues raised**
The spatial dimension	Location and spatial factors	Organisation and location of industrial districts?
The political dimension	Institutional and policy factors	Governance? "Democratic globalisation" *vs.* "Elite globalisation"?
The socio-cultural dimension	The socio-cultural factors	Relationships that transcend geographical borders?
The economic dimension	Economic and organisational factors	Threats and opportunities?

Overall, in the light of these possible changes, some observers express doubts about the current viability of industrial districts as organisational forms of production that are embedded in strong networks, developed over time and in geographical proximity (Berger & Locke, 2001; Nassimbeni, 2002). Some observers have raised questions about the long-term stability of industrial districts, arguing that they will be fragmented either through the take-over of the most successful local firms by MNCs or the formation of hierarchies of firms inside the districts, led by the most dynamic small and medium firms (Harrison, 1994; Harrison et. al., 1996). Others suggest that some

industrial districts will develop a "post-Marshallian" organisation of production to the extent that they might become "Marshallian nodes" within global networks (Amin & Thrift, 1994).

As increasingly diversified patterns of growth are emerging and different avenues are followed to face the new competitive challenges posed by globalisation, more attention should be paid to the resilience of industrial districts as the result of global competition. Little attention has been paid to the transformation of industrial districts and even less to models geared to explaining their shift from one model to another (Guerrieri & Pietrobelli, 2002). The next chapter will deal with the literature of industrial districts by exploring this issue in more detail.

CHAPTER III LITERATURE REVIEW

3.1 Introduction

The role played by the local context has been shown to be very important in an era of increasing globalisation, characterised by the dramatic reduction of spatial and temporal distances (Mariotti & Piscitello, 2001). A more profound understanding of the factors underpinning the competitiveness of industrial districts would be certainly desirable as the local dimension is progressively becoming asserted as one the key elements in the interpretation of the complexity that characterises contemporary industrial production. According to Becattini and Rullani (2000), industrial complexity refers to the variety and variability of the forms of production across different contexts – national, sectoral, organisational and local. More importantly, we have seen in Chapter II the extent to which the multidisciplinary character of globalisation meant as political, economical and social change that finds its roots in a changing geography seems particularly significant for industrial districts, whose theoretical foundations rely on a delicate balance between these factors (Rabellotti, 1997).

This literature review has four objectives. First of all, the genesis of the industrial district thesis is described in section 3.2. In particular, since the seminal work of Alfred Marshall (1920, 1930), scholars have placed different emphasis on the different attributes that industrial districts might posses. The aim of this part of the literature review is to define the conceptual boundaries of the industrial district. This concept has been widely studied along with clusters during the 1980s and

1990s, which poses a question of consistency between terminologies and concepts used in the literature. The section concludes with providing a "workable" definition of industrial districts as it has been endorsed by the present research.

Second, only recently have scholars began to question both the evolution of industrial districts over time as well as the implications of their external environment. Industrial districts in the literature have been traditionally outlined by a number of stylised facts, without really considering the possibility that these facts can change over time. In more recent years, as the question of change and of the capability of industrial districts to elaborate a strategy for transformation has become more contingent, this issue has received more attention. In line with Garofoli's study (1983), the present research identifies two main foci on change processes – *endogenous change* and *exogenous change*. To this end, section 3.3 will review the most influential contributions that have dealt with these two issues, with the aim of identifying the main factors that potentially could modify the configuration of industrial districts. The section will conclude by outlining the implications for the current research.

Third, the network theories literature is discussed in a survey of the field in section 3.4. Many industrial district scholars consider networks as a key concept in their research. Despite the extensive reference to strong networks as a characteristic of successful industrial districts, the literature on industrial districts is silent about the conditions that are thought to provide adaptive efficiency to industrial districts and their constituent firms with a competitive advantage. Although

network theories can effectively complement and counterbalance the descriptive level of analysis provided by the industrial district thesis, by providing a more rigorous definition of both "business networks" and "socio-economic network", they display a main pitfall. More precisely, network theories are limited by this dualistic approach – *business networks as organisational networks* and *socio-economic networks as personal networks* - that induces the researcher to look at these networks in isolation, hence preventing any substantial assessment of their interaction. The theory of embeddedness fills this gap by introducing an analytical tool, *the relational asset of the firm,* which is simultaneously able to capture *all* the relationships which small firms engage – from canonical business relationships traditionally characterised by the total or partial absence of social contents, to socio-economic relationships that are driven by social aims – that might affect organisational performances (Uzzi, 1997). Finally, in light of these considerations and by merging these different streams of literature – industrial district thesis, network theories and theories of embeddedness - a more comprehensive theoretical framework is proposed in Chapter IV.

3.2 The Industrial district thesis and its genesis

3.2.1 Overview

The mutual advantages of the interaction between social and business networks, "society" and "market" are traditionally conceptualised by the industrial district thesis. Almost a century ago, Alfred Marshall's (1930) impressions of the spatially clustered agglomerations of small firms in Lancashire and Sheffield inspired him to coin the term "industrial district". On the back of this seminal contribution, a massive bulk of literature has devoted attention to this phenomenon in the

attempt to provide a more rigorous definition. In particular what seems remarkable is the different emphasis placed by different scholars on the presence of social networks. The following sections will review the most influential contributions and will conclude by providing a "workable" definition of industrial districts.

3.2.2 The neo-classical formulation

The first attempt to rigorously conceptualise the mechanism of interaction between small firms, geographical concentration and sectoral specialisation can be traced back to mainstream neo-classical economics, precisely to the economist Alfred Marshall in the nineteenth century. The idea that national economic success depends on the development of localised concentrations of small firms was used by Marshall to explain Britain's economic growth and leadership during the nineteenth century. The industrial district thesis has been an inspirational framework for most of the recent literature on the subject, although the recent upsurge of interest comes from various strands of social science (Schmitz, 1997). Amongst the many organizational forms of production, Marshall's "industrial district" is the only conceptualisation that emphasises a spatial and a social dimension of production. The spatial dimension is considered an integral factor of production – the productive process finds its realisation through the concentration in a limited area of specialised productive units belonging to the same industrial activity. Geographically speaking, the industrial district identifies a spatial local system made of a group of localities. These localities are residential and productive settlements delimited by the social and economic relations of their population. In particular, the population's attitude is influenced by work (Marshall, 1920).

In his *'Principles of Economics'*, attempting to justify why these agglomeration of small firms occur, Marshall drew a distinction between "internal economies of scale" – which depend on the internal organisation and management of the resources within the firm – and "external economies of scale" – which depend on the overall progress and development of the industrial context in which firms operate (Oughton & Whittam, 1997)[6]. By "external economies", Marshall means those economies that *'can often be secured by the concentration of many small businesses of a similar character in particular localities, or as is commonly said, by the localisation of industry'* (Marshall, 1920: 266). The main difference between the two types of economies is therefore at the level at which they accrue: internal economies arise at the firm level, while external economies are available to all firms within an industry or economy and thus accrue at the industry, local, regional or aggregate level[7].

The distinction between external and internal economies is important because of their enabling factors. In Marshall's view, the industrial district represents the socio-spatial area where external economies are proficient. In this context, the implementation of external economies therefore requires the presence of a social fabric that identifies itself in

---

[6] Oughton and Whittam (1997) further distinguish four types of economies: internal economies, pecuniary or competitive external economies, technological or exogenous external economies and collective external economies.

[7] A common classification distinguishes between localisation external economies and urbanisation external economies (Hoover, 1948). The first ones occur when the externalities appear at the district level, the last ones occur when the externalities appear within the region or the locality where the firms are located.

such organisational form and that retains the capabilities to supporting it (Marshall, 1930). A further attribute can be identified as the location of industry in a particular district, which Marshall describes as an "industrial atmosphere": *'When an industry has thus chosen a locality for itself, it is likely to stay there long: so great are the advantages which people following the same skilled trade get from neighbourhood to one another. The mysteries of trade become no mysteries; but are as it were in the air, and children learn many of them unconsciously'* (Marshall, 1920: 271). The establishment of an industrial atmosphere thus takes on the appearance of a public good with skills being constantly developed and interchanged.

The interaction that results in children gaining skills leads to further developments in terms of the exchange of ideas which results in innovation within the district. Merchants not only purchase goods but also *'discuss with the manufacturer himself any suggestions which may occur to them for modifications in detail, to suit their individual judgements, or to meet the special tastes or requirements of localities with which they are connected'* (Marshall, 1930: 286). The industrial atmosphere leads to a long-term commitment of an industry to a particular locality. Following his empirical studies of the steel and textile industries in Sheffield and Solingen, Marshall discovers that particular industrial atmospheres *'which yield gratis to the manufacturers of cutlery great advantages'* (Marshall, 1930: 284) cannot be easily moved as they represent the historical outcome of the relation between the social fabric and the local firms. In addition, the continual interaction of buyers, sellers and producers resulted in more than an industrial atmosphere. Marshall coined the term "constructive cooperation" in identifying one of the factors which gave industrial

districts a competitive edge. According to the Marshallian view of industrial district, the socio-economic milieu provides an "organising context" for entrepreneurial activities.

To summarise, in Marshall's view the competitiveness of the industrial district relies on the presence of external economies which in turn depend on the idiosyncratic presence of two enabling factors, namely "industrial atmosphere" and "constructive cooperation". Although these factors result from the enduring interaction between social and business networks, their interaction has been summarily discussed within mainstream neo-classical economics. What is striking and to some extent surprising in the Marshallian analysis of industrial districts is that Marshall as a neo-classical economist, underlining the presence of intangible factors such as "industrial atmosphere" and "constructive cooperation", implicitly recognises that the industrial district is not merely the sum of its parts – geographical concentration, sectoral specialisation and strong networks. Furthermore, the label of "industrial atmosphere" as the "glue" that sticks together firms and local population to a geographical area conceivably raises doubts about the suitability of neoclassical economics for exhaustively explaining such interplay. Yet, considerations on "industrial atmosphere" are scarcely generaliseable since such an atmosphere is conceptualised as the historical outcome of the enduring interaction of social and business networks. In this sense Marshall places remarkable emphasis on the presence of social networks within industrial districts. More contemporary approaches have also pointed out their importance, as it will be discussed in the next section.

3.2.3 Contemporary approaches

In the last thirty years, successive studies have examined Marshall's industrial district under its different traits, not only attempting to provide a more concrete framework for its practical identification (Trigilia, 1986; Sforzi, 1989; Beccattini, 1990) but also to more deeply understand the propelling factors of its competitiveness. This very broad strand of literature mostly relies on non-econometric approaches that place emphasis on the so-called "soft externalities" – local social, institutional and cultural foundations of competitiveness. On the one hand, this shift of interest has been beneficial: the contemporary multi-disciplinary nature which characterises the industrial districts' debate today can be seen as the most significant output of such process. On the other hand, the increasing interest on soft externalities has gradually driven the industrial district thesis away from mainstream economics, putting in jeopardy the fruitful dialogue with new trade theory, new growth theory and location theory (Signorini, 2000). Today, despite many years of studies on industrial districts carried out by scholars of various disciplines, neither a systematic and comparative study (Paniccia, 1998) nor an exhaustive framework (Becattini, 2000) has been provided by the literature.

One account is represented by the "flexible specialisation" argument as it has been raised by Piore and Sabel (1983, 1984). Flexible specialisation is seen as a consequence of a crisis of mass production: mass markets have become saturated and consumers are now demanding specialised and differentiated goods to which the mass production system cannot respond. In the new unstable and uncertain environment where *'markets can no longer be effectively managed and controlled'*, it is important for firms to be able to respond quickly and

flexibly as market conditions change (Piore, 1986: 162). Flexibility, they argue, depends on specialisation, which demands a new articulation of the division of labour both within and between firms. In this view, the capacity of innovation that characterises industrial districts depends on *'the firm's internal organisation, its close relations with workers, its clients and its collaboration with other firms in the sector'*, all of which lead to a relationship between firms which *'resembles the collegial relation between good doctors, good lawyers, or good university teachers'* and to an awareness on the part of the firm that *'its success and very survival is linked to the collective efforts of the community to which it belongs and whose property it must defend'* (Brusco & Sabel, 1981: 106-108).

Flexible specialisation is therefore seen as the outcome of interaction between social and business relationships. In particular, Piore and Sabel have repeatedly stressed how cultural homogeneity lubricates social relationships among firms, reinforces consensus and group loyalty among both entrepreneurs and employees, ensures the social ostracism of rule-violators, provides a common language to facilitate information exchange, and establishes the basis for a cooperative, non-materialistic ideology (Piore & Sabel, 1984). Sabel further emphasises the importance of social networks, pointing to *'the learning advantages of network systems as industrial organisation'* (Sabel 1989: 30-31). Such networks, he argues, are crucial not only to small firms but to an increasing number of large corporations that are imitating and allying with the industrial districts since the adaptive capacities of hierarchical mass production corporations are exhausted.

A second explanation comes from Becattini, who similarly recognises that the competitiveness of industrial districts relies upon a strong degree of integration between social and business networks. In particular, inter-firm relationships are characterised by a "peculiar mix of cooperation and competition". His work shows that the study of a localised economic activity cannot merely rely on the analysis of the organisation of its production, but should also investigate the relation between the latter and the social organisation of its territoriality (Becattini, 2000). In this regard, he further acknowledges as an economist the theoretical and practical inadequacy of economics to explain fully the sources of competitiveness that propel and boost industrial districts. Yet, because of this awareness, Becattini firmly believes that the competitiveness of industrial districts as organisational forms resides in that unexplored area which economics cannot reach and his contribution therefore addresses the issue of industrial districts toward other disciplines.

He also provides a more precise definition of the relationship between the localisation of industry and its social structure, defining the industrial district as *'a social-territorial entity which is characterised by the active presence of a community of people and a population of firms in one naturally and historically bounded area'* (Becattini, 1990: 39). In the district, unlike in other environments, social and business networks tend to merge. Becattini further draws a more realistic picture of the social relations which are embedded in the district. In particular he regards the industrial district as a "social machine" whose inputs are represented by a common history, values and knowledge and whose output results in the cooperative behaviour of the social actors (Becattini, 2000: 34). In this perspective, the industrial district

as "social machine" penalises those inefficient or disloyal behaviours, rewarding the genuine participation of actors. The industrial district combines, then, a very active kind of competitive behaviour on the part of its firms, with a semi-conscious and semi-voluntary cooperation among them, resulting from the special way in which the socio-cultural system permeates and structure the market in the district (Pyke et. al., 1990).

A "population of firms" is described by Becattini as the spatial concentration of many small-medium firms in a bounded geographical area (Becattini, 1990). Each firm is specialised in a different task in one or a few complementary industries, configuring a model of extended division of labour. Such a population of firms quickly achieves interdependence with the local community, thus facilitating a situation whereby local interest prevails. This in turn makes the clash of interests between conflicting sections such as artisans and workers, on the one side, and employers on the other less acrimonious. The result is that prices of local inputs (fees paid to subcontractors and wages to employees) are fair and stable over time (Paniccia, 1998). A "community of people" is bound together by a homogeneous system of values and views (behaviours, expectations, language, etc.). These values are then spread throughout the district, supported and transmitted through generations thanks to a system of institutions and rules (markets, firms, extended families, technical schools, churches, political parties, trade unions, employers' associations etc.). To the extent that a community is geographically and historically bounded, face-to-face relationships are frequent and people tend to interact continuously, thereby developing a common culture. Within the restricted areas of industrial districts, norms of reciprocity and trust

tend to emerge (Becattini, 1990). The enduring cooperation of the local community, extended to economic exchanges, is accepted as being a crucial condition for the success of these areas (Dei Ottati, 1987).

The large number of job opportunities in the district, dependent on and at the same time a result of high work mobility, creates a "continuum of work positions" (home-based work, part-time, waged work, self-employment, entrepreneurship). This means that the district manages to employ each individual more or less optimally. As a result, high activity rates, very low rates of unemployment and an accent on independent work can be observed (Paniccia, 1998). The high interdependence between individual and social behaviours together with the involvement of all sections of the population in local economic life generates a "*sense of belonging*", "*local consensus*" and "*social compromise*" between competing interests. In addition, the proximity of firms and the local community ensures continuous flows of technical and commercial information as well as the diffusion of competencies and skills.

This "sense of belonging" is therefore in Becattini's view crucial for gaining all those advantages that the industrial district offers to its population of firms. Apart from the ordinary factors of production, the main asset of the firm is in large measure constituted by the profound knowledge of the social environment of its entrepreneur/director, by the network of both owner/director's business and social relationships, by the "embeddedness" of the firm in the social fabric and by its reputation. In this sense the firm is much more valuable within the

district than in the global market to the extent that the small firm itself can be seen as an "empty shell" (Becattini, 2000).

To summarise, both arguments – "flexible specialisation" and "peculiar mix of cooperation and competition" – clearly contribute to the lively debate on industrial district's competitiveness in favour of soft externalities, bringing together the industrial district thesis and mainstream economics at opposite extremes of a methodological problem. The latter, with its mono-disciplinary approach can address causal relationships but remains too abstract for those interested in explaining the real world; the former, with its typically multidisciplinary approach, take too many factors into account and finds difficult to distil the critical causal relationship from the morphologic connotation of the phenomena (Schmitz, 1997). This leads one to assume that a more comprehensive analysis of factors of competitiveness would be possible within theoretical frameworks provided by other social sciences.

In particular, within the industrial district thesis several issues deserve a more comprehensive articulation. First, although within different frameworks – Marshall's "industrial atmosphere" and "constructive cooperation", Piore and Sabel's "flexible specialisation" and cultural homogeneity, Becattini's coexistence of "cooperation and competition" and his view of industrial district as a "social machine" – at a descriptive level of analysis, these contributions tend to converge in identifying the network structure of the district consisting of business and social networks alike, as a source of competitiveness. Recent theories of agglomerations, as discussed in section 3.2.4, in their attempt to provide an exhaustive taxonomy of what constitutes a

cluster and what constitutes an industrial district partly address this issue by giving a different description of the different network structures that these different organisational forms respectively encompass.

Yet, the districts' network structure is considered only in terms of geographical proximity. In this respect, the industrial district thesis tends to portray a stereotyped image of industrial districts. The dynamism of the district is only discussed in relation to its closure – neither external influences nor the presence of outsiders have been contemplated within the scenario. Lazerson and Lorenzoni, however, point out how industrial districts are often dependent upon production resources originating from outside the immediate area. They highlight both the extent of manufacturing outside the districts and the presence of foreign capital in some industrial districts to underscore both the permeability of the district's boundaries and its attractiveness to external firms. They further express doubts about whether the district's alleged cultural homogeneity accounts for the absence of the costly coordinating and transaction problems that institutional economists such as Williamson have attributed to outsourcing. They argue on the contrary little attention has been paid to the dysfunctional elements of cultural homogeneity that could unravel industrial districts. Even if cultural homogeneity promotes economic exchange within the local community, it may limit economic exchange with outsiders who fear that insiders will be rewarded at their expense (Lazerson & Lorenzoni, 1990).

To conclude, only closure has been discussed by the industrial district literature and only in terms of its advantages. This, however, seems to be inadequate in an era of global economy, where *'the integration and globalisation of markets is transforming the bases of competition between firms'* (Porter, 1985: 23) and *'the new competitive challenges and the globalisation of several industries have sparked the growing need for access to external, world-wide competences and distinctive capabilities wherever they may be located'* (Nassimbeni, 1998: 543). This issue is more effectively addressed by section 3.3.3, when discussing industrial districts' dynamics.

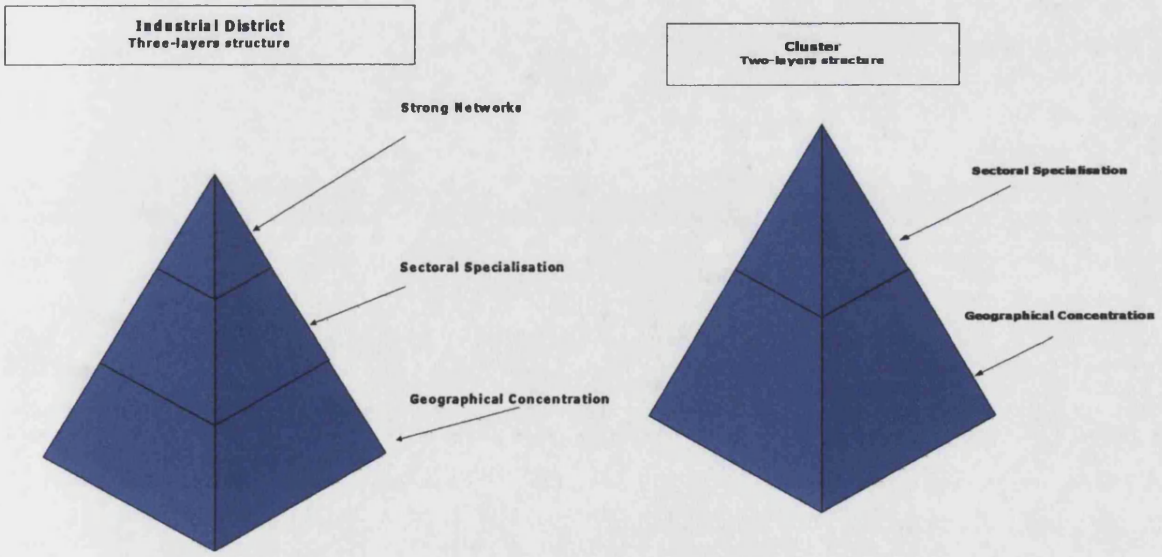
3.2.4 Local industrial agglomerations and their taxonomy

Over the past decade, there has been a growing interest in local industrial agglomeration, not only by economic geographers but also by economists and policy-makers alike. Whereas the terms "networks", "clusters" and "industrial districts" are often used interchangeably by this literature, these terms identify three distinct concepts. Although the terms "cluster" and "industrial district" are often used as interchangeable concepts by the literature, they broadly cover two distinct phenomena.

As previously defined in Chapter II, section 2.4, clusters have two defining features, namely geographical concentration and sectoral specialisation and they can be defined as *'a group of producers making similar things in close vicinity to each other'* (Schmitz, 1982: 435). Industrial districts are geographical concentrations of firms and supporting institutions producing some or similar products but which are underpinned by strong networks that confer benefits to the

participants in the districts (McDonald & Vertova, 2001). More precisely, the authors identify "industrial districts type I" as those districts whose networks mainly rely on business networks, while "industrial districts type II" are those districts whose networks also rely on socio-economic networks. Figure 3.1 is useful in order to visualise the main difference between industrial districts and clusters. Obviously this clear-cut distinction is over-simplicistic as both industrial districts and clusters do not necessarily manifest the full range of features. Thus in principle all industrial districts are clusters, but not all clusters are industrial districts. Furthermore clusters may display a varying degree of geographical concentration: industry clusters whose relations are primarily within the nation-state, but are not local, are conceptualised as national systems of innovation (Porter, 1990); industry clusters whose relations are primarily international are characterised as nodes within international networks of production and distribution (Amin & Thrift, 1994).

Figure 3.1: Industrial districts *versus* Clusters



In general terms, the literature seems to converge in acknowledging that whereas industrial districts possess a three-layer structure that comprises geographical concentration, sectoral specialisation as well as strong networks, clusters possess a two-layer structure made of geographical concentration and sectoral specialisation. In line with this assumption, several contributions on local industrial agglomerations also use the defining features of network structure to distinguish between clusters and industrial districts. A closer look at this bulk of research will allow us to draw a more detailed picture of the network structure of industrial districts and to contextualise it in a more dynamic fashion.

In order to distinguish between networks and clusters, Maskell and Lorenzen (2004) for example analyse how firms maximise the benefits of market relations while keeping transaction costs down. According to this view, firms that operate in standard good markets tend to prefer the freedom of spot-transactions and choosing different partners. However, in many other cases, firms tend to choose between two strategies: they engage in network formation when their set of customers, suppliers and products is reasonably stable and in clustering when this is not the case. In other words, the choice depends on the degree of expected relational stability that in turn reflects cardinal variance in industry uncertainty in relation to unforeseeable changes in technology, supply and demand. If industry ambiguity prevails and firms regularly need to redefine vital aspects of their products, project relations become the common form of interaction and firms tend to opt for a strategy of being stakeholder in a cluster.

Table 3.1 summarises Maskell and Lorenzen's attributes that distinguish networks from clusters. By comparing networks vs. clusters, Maskell and Lorenzen argue that clusters are one specific market organisation where commodities, services and knowledge are traded in a notably efficient way among the constituent firms without restricting their abilities to build pipelines and to interact with suppliers and customers residing elsewhere. According to Maskell (2001) three factors are of particular significance for cluster development.

Table 3.1: Networks *versus* Clusters

Networks	Clusters
Institutional "arrangement"	Institutional "environment"
Firms as shareholders	Firms as stakeholders
Strong ties	Weak ties
Club institutions	Social institutions
Trust, sunk costs	Social trust, reputation
Codebooks	Social codebooks

(Source: Maskell & Lorenzen, 2004)

First, firms tend to hold divergent beliefs about problem solving arrangements. Firms in geographical clusters, however, are placed in a situation where differences in solutions are visible to anyone because it is by watching, discussing and comparing dissimilar solutions that they become engaged in a process of continuous improvement on which their survival depends. In this sense, the variation between and among firms doing similar things in a geographical cluster promotes the generation of ideas and guides interpretations without imposing

uniformity. The second factor is the role of social capital. In this context, the mere location of firms in a geographical cluster represents an irreversible investment that provides them with an arsenal of instruments to obtain and understand the most subtle, elusive and complex information of possible relevance. The third factor is the deep division of labour. Because of the local variance in problem solving arrangements and the ease of reassembling dispersed knowledge within the cluster, the division of labour can be deepened. This in turn enhances the level of knowledge creation. In addition, firms often compete while at the same time helping each other in overcoming technical problems by lending materials and swapping surplus capacity or by exchanging information.

Economic geographers have devoted considerable effort to study local industrial agglomeration in order to identify the economic, social and institutional processes involved. Martin and Sunley (2003) heavily criticise Michael Porter's construct of a cluster in order to highlight its problematic nature due to its theorisation, its empirical identification, its benefits as well as its use in policy-making. As for the definition, they contend that Porter's definition is vague, both in terms of geographical scale and socio-economic dynamic. In term of geographical scale, although throughout his work on clusters Porter emphasises the critical role of geographical proximity, the term is never defined with any precision. As for clusters' socio-economic dynamics, the lack of self-defining boundaries in terms of inter-sectoral, inter-firm linkages as well as socio-economic networks makes the notion so generic that it can be used as an "umbrella term" to refer to a whole assortment of localised industrial agglomerations. According to these authors, Porter's clever positioning and marketing

of the cluster idea have been extremely influential in selling it to policy-makers all over the world, however the popularity of the concept is bound to decline as many fashionable ideas often do.

The terms clusters and regions are also used interchangeably elsewhere (Enright 1996, 2003). A regional cluster is an industrial cluster in which member firms are in close geographic proximity to each other (Enright 1996, 2003). In this sense, regional clusters, as defined here, include industrial districts of small and medium craft firms, concentrations of high technology firms related through the development and use of common technologies, and production systems that contain large hub firms and their local suppliers and spinoffs. Regional clusters therefore subsume the spatial manifestations of the "flexible production complexes" of Scott and Storper (1989), and the "innovative milieu" of Maillat (1991). Given the focus of the present research, the distinction between regional clusters and industrial districts (a subset of regional clusters) is worth highlighting. Whereas the focal point of an industrial district is often a single industry or even a single industry segment, regional clusters generally involve a range of related industries. The rationale for using the relatively broad term, regional cluster, is that all of the terms alluded to describe geographic agglomerations of firms in the same or related industries and as such are used to describe aspects of the same broad phenomenon. In this sense, according to this approach, whereas other organisational attributes seem important to identify industrial districts, far less emphasis is placed on the presence of social networks.

In a study of different models of local development, Garofoli (1983) also proposes a typology for regional clusters. The classification applies beyond the industrial sector and is based on variables such as the dominant production structure, the firms' size, the inter-firm-relationships, the background of the entrepreneurs, the characteristics of the local labour market, the sources of innovation, the social structure, the local institutions as well as the economic policies. On the basis of these variables he defines three types of regional systems: areas of productive specialisation, local production systems and system areas. Areas of productive specialisation are usually areas of recent creation where firms compete for the same sector, with limited inter-firm linkages and where the development model tends to be "extensive" (through a significant rise in term of employment) and "exogenous" (often propelled by outside agents). Local production systems also tend to be characterised by firms belonging to the same sector but having stronger and more frequent inter-firm relationships, with few production linkages with firms in different sectors. The local production system is often nested in historical traditions and their development model can also be "extensive" but "endogenous" (led by local agents).In this sense, industrial districts can be subsumed into local production systems where strong networks play a crucial role for their viability. System areas are more sophisticated and complex forms of clusters, with a clear division of labour among the participating firms, and characterised by inter-firm relationships amongst firms in the same sectors as well as in others. Their development model can be defined as "intensive" (without a rise in employment) and "endogenous" (based on the exploitation of local resources).

A different taxonomy is suggested by Markusen (1996). She argues that the emergence of "sticky places" in a "slippery space", due to dramatically improved communication, and increasingly mobility of production factors as well as firms, may be related to numerous variants of industrial clusters. She thus opts for a wide connotation of industrial districts, which is not limited to the most common variant (i.e. the Marshallian district). Drawing on an extensive analysis of the most successful metropolitan regions in the US, Markusen develops several typologies of industrial districts on the basis of several variables such as firms' size and inter-firm relations.

Beside the canonical Marshallian industrial district, the "hub-and-spoke" industrial district is the second type that has been empirically detected in the US (Markusen, 1996). It occurs where one or more firms act as hubs to the regional economy, with suppliers and related activities spread around them like spokes of a wheel. A single large firm or several firms in one or more sectors may act as hubs, surrounded by smaller suppliers. The large hub-firm has often links to suppliers, competitors and customers outside the district. These linkages can act as conduits for innovation and creativity and therefore enable the transfer of new ideas and technology to the host region. On the other side, these linkages may also detect potential benefits and opportunities elsewhere, and drive the hub firm out of the region. In terms of development process, this type of industrial district is often the outcome of a process of agglomeration of skilled labour and services around the hub, with the spoke firms setting up alternative and independent links and benefiting from the external economies generated by the district. In this scenario, the presence of a large hub-firm with several activities and multiple linkages would foster or lead

the industrial district to explore opportunities into new sectors, and diversify its production from the traditional specialisation.

The "satellite industrial platform" is the third type of industrial district described by Markusen: it consists of an agglomeration of subsidiaries of externally based multi-plant firms. This kind of district is often induced by industrial policies to stimulate regional development. Key investment decisions are made outside the district and firms tend to be independent in terms of upstream and downstream operations as well as from the agglomeration of other competitors and suppliers in the same area. Constraints to the development of this type of district are mainly due to the lack of local resources such as finance, technical expertise, business services as well as "patient capital"[8]. Overall, the prospects of endogenous development of this type of district appear remarkably conditioned by externally-made decisions.

The fourth type of district occurs when industrial activities are "anchored" to a region by a public institution or non-profit organisation, such as a military base, a university or a governmental body. Within this context, politics may play a central role in the development of the district and new indigenous firms may emerge out of specialised technology transfer or business services provided by or spilled over from the anchor institution. The developmental process of the district and its diversification into different industries is likely to depend on several specific characteristics of the district, such as the specificities of the prevailing industry, the technology in use and its

[8] Presence of financial institutions willing to take long-term risks due to the confidence and information that they possess.

transferability from the "anchor" to local firms as well as the existence of local competitive factors (e.g. local demand or distribution channels, availability of skilled labour, or the presence of "patient capital"). Overall, this approach in its attempt to produce a taxonomy for industrial districts tends to underestimate the presence of social networks by placing more emphasis on different organisational attributes.

By commenting on Markusen's taxonomy, Guerrieri and Pietrobelli (2000) argue that real-world districts may embrace the features of one or more types, but most importantly over time they may mutate from one to another one. A Marshallian industrial district for instance with the emergence of larger oligopolistic firms can transform itself into a hub-and-spoke district. Similarly, satellite platforms may mutate into a Marshallian district by strengthening and intensifying backward and forward linkages among firms. A hub-and-spoke might also convert into a Marshallian district or an infant variation of it, following the failure or the loss of power of the anchor organisation. According to the authors firms tend to share a geographical agglomeration along three broad modalities: casual geographical clustering of firms, Marshallian industrial districts and enterprise network with some form of leadership (Guerrieri & Pietrobelli, 2000). Casual geographical clustering of firms generally display occasional inter-firm linkages, little experience of cooperation, non-existent or little developed local institutions. Marshallian industrial districts tend display intense inter-firm linkages, much better developed practices of cooperation, more developed and effective local institutions as well as economies of scale at the district level made possible by substantial enterprise specialisation. Enterprise network with some form of leadership

prevailing might be a hub-and-spoke, leader-followers, or satellite platform, with the leader providing the strategic services and impetus for diversification into different products or sectors, often implying the reorganisation of production within the district and new linkages between firms and local institutions.

Guerrieri and Pietrobelli (2000) argue that these different forms of agglomeration are not necessarily sequential stages of development as industrial districts may remain persistently different, depending on industry or country characteristics, historical circumstances and "lock-ins". In a similar fashion Rabellotti effectively contends that industrial districts may differ because they are in different stages of development or follow different development trajectories (Rabellotti, 1997). In line with this view, Becattini describes the process of "districtualisation" as a constant modulation of a set process in time and in space rather than as "a punctiform event": the industrial district in a given place and a particular moment may or may not exist (Becattini, 2002). To conclude, different approaches seem therefore to have developed their own workable definitions of the industrial district. In the following section, I will compare such definitions and provide an explanation for the definition of the industrial district which is adopted by the present research.

3.2.5 A "workable" definition of the industrial district

The overview of schools of thought and definitions presented in the previous sections only partially covers the enormous empirical and theoretical literature which has been produced in recent years in the attempt to identify a taxonomy of industrial districts and clusters. One

result of this extensive work is that there has been a tendency toward hybridisation of the original concept of Marshallian industrial district so that different definitions have been proposed to address very similar economic phenomena, while in other cases very similar definitions have been adopted to describe different concepts. The empirical literature on industrial districts has highlighted a multifaceted world of industrial districts and local agglomerations, offering many rich insights on their network structure but is far from providing a rigorous comparative approach. The lack of consensus on what constitutes a cluster or an industrial district has generated a terminological melting-pot which blurs the boundaries of the phenomena under investigation. Table 3.2 shows how concepts vary according to whether, beyond geographic concentration and sectoral specialisation of firms, the definition of industrial districts also includes indications on strong networks by placing different emphasis on the presence of business networks and socio-economic networks. Different approaches (rows) seem therefore to have developed their own workable definition of industrial district by placing different emphasis on the different dimensions (columns).

Clarification of the various definitions of industrial districts is necessary for several reasons: first, because, as suggested by Paniccia (1998) this "semantic ambiguity" makes the concept difficult to be operationalised, making it even harder to test any cause-effect relation between the presence of given characteristics in the network structures and their outcomes. Second, definitions matter because considering the Marshallian Italian industrial district as a dominant paradigmatic model seems an excessively myopic perspective (Rabellotti, 1995). Third, as will be discussed in the next section,

industrial districts tend to change over time, both in absolute terms, consistent with the evolution of their member firms and workers, and in relative terms, compared with other districts. On the basis of this consideration, attributing a crystallised set of attributes to these ever-changing agglomerative productive phenomena is of limited value. It is more useful instead to focus on those attributes that find a wider consensus in the literature and that are likely to be present over time: the geographical concentration, sectoral specialisation and the presence of business networks. These are the "minimal requirements" that according to the literature underpin the network structure of industrial districts. Focussing on these common set of criteria will allow to classify industrial districts according to those structural features that may support them to face the "globalisation challenge".

Table 3.2 : Definition of industrial district and its dimensions

Author	Geographical concentration	Sectoral specialisation	Business networks	Socio-economic networks
Marshall (1920, 1930)	Residential and productive settlements	The same industry	Constructive cooperation	Industrial atmosphere
Piore & Sabel (1983, 1984) Piore (1986) Sabel (1989) Brusco & Sabel (1981)	Yes	Yes	Flexible specialisation	Cultural homogeneity Innovation and learning
Becattini (1990, 2000, 2002) Dei Ottati (1987)	Yes	One or few complementary industries	A mix of competition and cooperation	A social machine
Lazerson & Lorenzoni (1990)	Yes	Yes	Yes	Cultural homogeneity
Nassimbeni (1998)	Yes	Yes	Yes	Yes
McDonald & Vertova (2002)	Yes	Yes	Yes	Yes/No depending if Industrial District type I or II
Enright (1996, 2003)	Yes	Single industry or a single industry segment	Yes	No
Garofoli (1983)	Yes	Same sector	Inter-firm relationships	Social structure
Markusen (1996)	Yes		Cooperation Mechanisms of coordination	Cultural identity developed to some degree according to typologies
Guerrieri & Pietrobelli (2000)	Yes	Yes	Inter-firm linkages	No
Rabellotti (1997)	Yes	Yes	Yes	Yes

To this end, in line with the taxonomy introduced by McDonald & Vertova (2001) I distinguish between two types of industrial districts: whereas industrial districts type I are those that are only engaged in business networks, industrial districts type II those that are also engaged in socio-economic networks and resemble the Marshallian district. This definition is very simple. With few exceptions, it is remarkably simpler than most of those discussed in the previous sections and it allows a simpler taxonomy. The rationale behind this classification is that, according to the authors socio-economic networks are trust-based and they are more likely to be important in societies where formal institutional structures are ineffective in reducing transaction costs. Vice-versa, socio-economic networks may not emerge if institutional frameworks can deliver acceptable means of establishing trust. The following table summarises the definitions (rows) that have been adopted so far, associated with their "minimal requirements".

Table 3.3: Definitions and their "minimal requirements"

Definition	Geographical concentration	Sectoral specialisation	Business networks	Socio-economic networks
Cluster	Yes	Yes	To some extent	No
Industrial district type I	Yes	Yes	Business networks	No
Industrial district type II	Yes	Yes	Business networks	Socio-economic networks

However, this does not imply that within an industrial district there is nothing more than geographical concentration, sectoral specialisation and strong business networks, but that socio-economic networks are not there *by definition*, as remarked by Schmitz (1995) as well as by Giuliani (2005).

3.3 Industrial districts' dynamics

3.3.1 Overview

As mentioned when reviewing the genesis of the industrial district thesis, it is only recently that scholars have begun to question both the evolution of industrial districts over time as well as the implications of their external environment. Industrial districts in the literature have been in fact traditionally outlined by a number of stylised facts, without really considering the possibility that these facts can change over time.

Only during the 1980s, did the possible evolution of industrial districts start to receive attention by scholars. Garofoli (1982), when discussing different system areas, outlined the possibility that a change of internal conditions (for example a lack of skilled labour force, an increase of wages or a lack of infrastructures) and/or in external conditions (for instance technological innovation or a change in the international market) may induce a crisis in the system area and possibly a change in its structure. In more recent years, as the question of change and of the capability of industrial districts to elaborate a strategy for transformation has become more contingent, this issue has received more attention. In line with Garofoli's study we may identify two main foci on change processes. Consistently with the

"ideal-type" of industrial district described in section 2.4, this section will review the most influential contributions that have dealt with these two issues by grouping them across the four main dimensions: location and spatial factors, institutional and policy factors, social factors and economic and organisational factors. The aim of this section is to identify the main factors that potentially could modify the configuration of industrial districts. The section will conclude by outlining the implications for the current research.

3.3.2 Change as an endogenous process

One way of explaining change of industrial districts is to focus upon *endogenous* processes. As for location and spatial factors, Rabellotti (1997) for example pointed out how the decreased availability of skilled labour due to increasing number of young people who prefer to look for non-manual jobs outside the footwear industry, mainly in tertiary sector could affect the geographical distribution of economic activities within industrial districts. Similarly, Garofoli (1982) when discussing different system areas outlined the possibility that a lack of skilled labour force, an increase of wages or a lack of infrastructure may induce a crisis in the system area and possibly a change in its location and spatial structure. New economic geography for instance focuses upon endogenous multiplier effects and cumulative causation (Krugman, 1991; Lorenzen, 2005). This stream of theory invokes new trade theory to explain change by virtues of shifts in intra-cluster trade flows as a result of shifting externalities.

As for institutional and policy factors, other scholars try to explain endogenous change by discussing the transformation of the

institutional structures. Some authors for example focus on inter-firm relations and apply transaction costs economics and other concomitant perspectives to explain growth processes (Iammarino & McCann, 2006). In this view knowledge externalities and cumulative causation in industrial districts and clusters alike are determined by local institutions that facilitate cognitive coordination, lowering transaction costs and promoting localised learning (Maskell, 2001).

As for the socio-cultural factors, Amin and Thrift (1994) for instance ascribe industrial districts' capacity for change to traditions or social capital laid down in their institutional sediment. Research in this tradition is mainly descriptive but it explains change of industrial districts in terms of rises, shifts or disruption of social institutions, for example through immigration and emigration, local firms "outgrowing" industrial districts and breaching social hegemony, or disruptive policy action.

As for economic and organisational factors, Belussi (2005) explores how technologically induced exogenous change at the level of industrial district always takes place in an interplay between "old" and "new". Addressing the influence of new enabling technologies, she points out that industrial districts tend to adopt those enabling technologies differently, depending on their structure and history. The literature also emphasises the role of leading firms (Lazerson & Lorenzoni, 1999) which are typically large technologically advanced and regarded as engines of cluster change and development. Great interest has been recently expressed in the technological gatekeeping process of such firms (Giuliani and Bell, 2005) and how they channel

extra-cluster knowledge into the local, intra-cluster knowledge system. In particular, Giuliani (2005), by looking at the endogenous structure of what she terms "economic localities", points out their importance for the capacity of clusters to absorb exogenous knowledge, thus attempting to explain the persistent performance differences between clusters in different parts of the globe. According to Giuliani, the intra-cluster knowledge system is characterised by different structural characteristics according to the absolute and relative knowledge bases of firms. Densely connected knowledge systems should be associated with the presence of firms with strong knowledge bases. Conversely, the predominance of firms with weak knowledge basis is associated with highly disconnected and fragmented knowledge systems at the intra-cluster level. Tappi (2005), taking a similar outlook, addresses the problem of absorption of knowledge in more detail, studying how some entrepreneurs, through their "being extrovert" to the outside world and their cognitive capabilities, play a particularly important role for the evolution of industrial districts and clusters alike.

3.3.3 Change as an exogenous process

One way of explaining change of industrial districts and clusters alike is to focus upon *exogenous* factors. As for location and spatial factors, as has been discussed in Chapter II, early location theory in economic geography (Weber, 1928) explained both the agglomeration and the dispersion of firms by studying transport and production costs. According to this stream of theories, a change of the location pattern, and hence of clustering in the economic landscape, is due to changes in cost structures and technologies that applied across geographical space. Later developments in economic geography (Krugman, 1996) has greatly refined such explanations to include multiplier effects in

the form of increasing returns as a source of trade. In this view, industrial districts' change is explained by change of such international trade flows. This, however, leaves little room for change of industrial districts, unless as part of a global restructuring of trade flows.

As for institutional and policy factors, the centre-periphery perspective (Amin, 1972) similarly argues that political powers and trade regimes lock industrial districts into particular trade and development patterns. In this sense the existence of particular institutionalised trade regimes or the presence of regional blocks is seen as a determinant for industrial districts' change and their international viability. Rabellotti (1997) for example shows that the different trade regimes adopted in Italy and Mexico had a significant impact on the districts' structure and on their development processes; they also had an impact on the quality and intensity of linkages and the degree of collective efficiency of the clusters analysed. By contrast, Signorini (2000) emphasises the importance of national currencies in determining the competitiveness of industrial districts' export activities.

As for the socio-cultural factors, mainly sociological studies dealing with labour mobility are taking into account migration and how it might negatively affect the social cohesion of industrial districts (Becattini, 2000). Other studies point out the extent to which industrial districts, especially the Italian ones, through relying more and more on migrant labour, are implementing a deliberate strategy seen as a profitable alternative to the international fragmentation of production (Murat & Paba, 2004). According to the authors, the fact that Italian industrial districts are less engaged in international outsourcing in

comparison with their foreign counterparts, is a tangible sign that the preferred strategy is to employ migrant labour. One of the anticipated consequences associated with this practice is, according to this perspective, that the overall specialisation of industrial districts will be driven towards the low-skilled intensive sectors and this in turn will reduce their long term growth rate.

As for economic and organisational factors, a major bulk of literature stems from considerations about the ongoing sectoral trends as well as technological regimes. An exhaustive discussion of the significance of the sector and its implications for change will be thoroughly reviewed in Chapter IV, when discussing the different level of analysis endorsed by the theoretical framework. As for technological regimes, Guerrieri and Pietrobelli (2001) stress the importance of the external inducements derived from technology and technological change as one of the crucial factors explaining the evolution of industrial districts. According to the authors, the changes in the technology paradigms that crucially affect the foundations of competitiveness, are increasingly shaped by the internationalisation process and contribute to determining the prevailing form of firm strategy, and especially inter-firm attitudes and the industrial organisation prevailing within industrial districts. To this end they identify change across two main strategies - deepening of product specialisation and diversification – and use them as a benchmarking tool to compare actual models of evolution. In a similar fashion, the importance of extra-cluster networking has been increasingly highlighted by the cluster literature in both developed and developing countries (Rabellotti, 1997; Humphrey & Schmitz, 2002; Bathelt et. al., 2004; Giuliani, 2005) and several contributions have now explored the processes by which the

integration of extra-cluster knowledge and intra-cluster knowledge occurs (Giuliani, 2005; Iammarino & McCann, 2006). Meanwhile other studies have documented the presence of firms that are relevant for the external openness of a cluster. They have shown that the inflow of knowledge into a cluster can be both driven by actors from outside, who are attracted into the cluster by the availability of natural and knowledge resources as well as by local actors who try to tap into outside knowledge (Cantwell & Iammarino, 2003).

As mentioned in Chapter II, modern theories of FDI address the issue of closure by analysing the implications of FDI on cluster dynamics as well as providing additional insights on clusters' developmental processes due to exogenous causes. According to these theories, industrial districts and clusters alike may arise, shift or decline as a result of MNC's global investments and search for markets for both outputs and inputs. Driffield and Hughes (2003) for instance demonstrate that inward investment stimulates domestic investment confirming that agglomeration economies can be generated as a result of FDI. However, there is also evidence that an important determinant of the extent of spillovers from FDI is the technology gap between the foreign and domestic sectors. In cases where host regions or industries exhibit only low levels of physical and human capital intensity, then such firms may not be able to assimilate any technology externalities that occur as a result of inward investment. Another significant factor is the type of FDI that is attracted to such locations. Where firms are attracted to a region because of low wages, or simply because of a capital or employment subsidy, then the activities undertaken by the foreign firm may be low skill, low value added activities. In such cases,

technology spillovers will again be limited and the displacement effect will dominate.

Similarly, Birkinshaw (2000) investigates the role that MNCs play in the evolution of clusters. More precisely he seeks to understand how the level of foreign ownership of the industry cluster affects its dynamic, its capacity for upgrading as well as its long-term potential. Birkinshaw argues that in mature industries that are consolidating, foreign ownership has little impact on the cluster dynamics. In rapidly growing industries, however, there is considerable scope for upgrading and the question of foreign ownership is far from trivial. Table 3.4 lists various features of clusters in the two industry types. Once established, foreign-owned companies can only enhance the leadership of the cluster and contribute to its upgrading. According to this view, foreign firms tend to locate their operations in industrial clusters to benefit from economies of agglomeration as well as for credibility. Both these economic and institutional logics are self-reinforcing – once the cluster has established its leadership in a given sector, it will attract further investment. The second key contingency for understanding cluster evolution and the role of foreign investment is the dynamism of the cluster. The latter refers to the scope of activities and quality of the inter-firm linkages among firms in the cluster (Porter, 1990).

Table 3.4: Birkinshaw's taxonomy

	Mature industry	High-growth industry
Major trends in industry on global scale	Consolidation and restructuring	New investment, expanding customer base
Nature of clusters in industry	Well-established clusters, relatively few in number and decreasing	Many emerging clusters, mostly less well-established ones with a few exceptions
Opportunities for investment	Poor. New investment in one cluster typically means divestment in another	Good. Room for all clusters to attract investment in the short term
Relative strengths and weaknesses of "competing" clusters	Well-understood	Very ambiguous
Reasons for foreign investment	Acquisition of existing firms; incremental investment	Multiple – access to customers, local resources, suppliers, innovation, etc..
Impact of foreign investment on cluster	Generally positive, with some risks in weaker clusters	Positive in short term. In medium term, it depends on nature on investment

(Source: Birkinshaw, 2000)

According to Birkinshaw, in consolidating industries, foreign ownership is mostly positive (Birkinshaw, 2000). Clusters displaying high dynamism but operating in a consolidating industry will benefit from foreign investment because it is likely to be made as a sign of confidence in the cluster. Clusters displaying low dynamism but operating in a consolidating industry will receive foreign investment

with some ambivalence. Typically such investment is made through acquisitions and it can have a very positive outcome if the investment results in technology transfer and access to the investing company's global market presence. However, it can have a negative outcome if foreign ownership ends up leading to consolidation and closure of the firm that was acquired. In high-growth industries, the impact of foreign investment will be wholly positive in clusters displaying high dynamism, whereas in clusters displaying low dynamism foreign investment is still mostly positive but it depends on the quality of that specific investment.

3.3.4 Understanding change and the implications for the current research

As is clear from the previous sections, there is still quite some way to go before we reach an exhaustive understanding of how endogenous and exogenous processes come together in changing industrial districts and clusters alike (Lorenzen, 2005). Table 3.5 summarises the main contributions from the literature by listing the different factors that have been identified in the previous sections (columns) in relation to the different dimensions of the "ideal type" of industrial district (rows). Following this classification, several considerations will be made.

Table 3.5: Determinants of change as identified by the literature		
The "ideal type" of industrial district (Rabellotti, 1997)	**Endogenous change**	**Exogenous change**
Location and spatial factors	Lack of skilled labour Increase of wages Lack of infrastructures Intra-cluster trade flows	Change in cost structure and technology International trade flows
Institutional and policy factors	The transformation of the local institutional structures	Trade regimes National currencies
The socio-cultural factors	Change in traditions or social capital Migration and Emigration	Migration
Economic and organisational factors	Adoption of enabling technologies Leading firms Technological gate-keeping Absorptive capacity	Sectoral trends Technological regimes Extra-cluster networking Spillovers from FDI

First, both industrial districts and clusters alike, as "nodes in global networks" (Amin & Thrift, 1994), are dependent upon global trade and demand patterns as well as exogenous technological and political changes. But many industrial districts and clusters, particularly in high-tech industries, function as innovation hubs and seedbeds for MNCs and hence play important roles for driving such global changes (Nassimbeni, 1998). We may only understand the dynamics of a range of industries by assessing change in technological regimes, demand and policy change in close combination with the change of a range of key industries. Second, while increasingly MNCs "stroll" across the world and invest in and enter into industrial districts and clusters alike, there is a growing category of clusters where MNCs are less foot loose and need to step carefully. If they want to benefit from assets and externalities in particular knowledge-based clusters that offer highly qualified labour and high-tech knowledge, MNCs have to adjust their strategy towards the mechanisms of endogenous change that underpin cluster structures. The influence of such clusters is influenced by FDI, but the development of many MNCs is also dependent upon these clusters. Third, the functioning and change of clusters, particularly for industrial districts type II, depends upon the richness of socio-economic networks, however these networks take a variety of forms as will be discussed in section 3.4. Most importantly, while relations might be predominantly local, they are not exclusively so. On the one hand, the literature on industrial districts places a lot of emphasis on geographical proximity and the benefits that are associated with it. On the other hand, Bathelt et. al. (2004) and increasingly many other scholars suggest that engaging in relations with agents located outside the industrial districts is becoming crucial.

Fourth, exogenous relations and the capacity of a cluster to absorb new knowledge from the outside, may in turn rest upon endogenous relations. The adoption of new technologies and practices in a cluster are intertwined processes and they depend upon both exogenous factors and endogenous factors. From these preliminary considerations, it follows that in order to understand change of industrial districts and clusters alike, endogenous factors and exogenous factors cannot be looked at in isolation.

3.4 Network theories

3.4.1 Overview

Many industrial district scholars consider networks as a key concept in their research, referring to the existence of a "network paradigm" (Cooke & Morgan, 1994), "network metaphor" (Johannisson, 1995), or "network approach" (Courlet & Soulage, 1995). Related terms include "innovation system" (Asheim & Isaksen, 1997), "milieu" (Maillat, 1996) and "cluster" (Porter, 1990). Nowhere is this attention to networks more prominent than in the literature on industrial districts (Lazerson & Lorenzoni, 1990; De Toni, Nassimbeni & Tonchia, 1995; De Toni & Nassimbeni, 1996; Nassimbeni, 1998;).

Despite the extensive reference to strong networks as a crucial characteristic of industrial districts, the wide literature on industrial districts is silent about the conditions that are thought to provide adaptive efficiency to industrial districts and competitive advantage their constituent firms. Given the dominance of the research tradition in neo-classical economics, this area has made significantly more theoretical advances than methodological progress.

This issue is however effectively addressed by network theories, where districts' network structure is seen as an important defining characteristic of industrial districts, binding firms together into a coherent and innovative system of relational contracting, collaborative product development and multiplex inter-organisational alliances (Lazerson & Lorenzoni, 1990). To this end, network theories can effectively complement and counterbalance the descriptive level of analysis provided by the industrial district thesis by providing a more rigorous description of what constitutes the network structure of industrial districts. First, network theories provide a more rigorous definition of business networks. In general terms, six major perspectives can be identified and they are namely transaction costs economics (Williamson, 1985), resource dependence view (Scott, 1987), strategic choice theory, stakeholder theory (Freeman, 1994), learning theory (Hamel, 1991) and institutional theory (Di Maggio & Powell, 1983). Although each paradigm alone is insufficient to capture the complexity that the district network structure encompasses, the fact that inter-firm relations can be justified from such diverse theoretical backgrounds is impressive (Barringer & Harrison, 2000). Second, network theories provide a better conceptualisation of socio-economic networks and their possible benefits. The main pitfall of network theories is however this dichotomist view of "business networks" and "socio-economic networks" that induce the researcher to look at these different networks in isolation and thus to dismiss their possible interaction.

The theory of embeddedness addresses this issue by introducing a useful analytical tool, *the relational asset of the firm* that encompasses *all* the relationships which small firms engage in within the local

community – from canonical business relationships traditionally characterised by the total or partial absence of social contents, to non-economic relationships that are driven by social aims – that might affect organisational performances. In this sense business networks and social networks are not looked in isolation but in a joint manner so that each receive an adequate assessment. However, the paradox of embeddedness, the fundamental assumption that economic action is embedded in ongoing social relationships that at times facilitate and at times obstruct economic exchange, suffers from a theoretical indefiniteness (Uzzi, 1997).

Drawing on the theoretical perspectives provided by the industrial district thesis (section 3.3) as well as the methodological approach provided by network theories (section 3.4), and in particular by theory of embeddedness (section 3.4.3), the research attempts to introduce a more encompassing theoretical framework. As a result, by overcoming the traditional dichotomy between business networks *versus* socio-economic networks, the relational asset of the firm appears a "new interpretative lens" to analyse the resilience of industrial districts to cope with the dramatic changes occurring in their competitive environment. This in turn will permit the formulation of more articulate assumptions on districts' network structure and the conditions that are thought to provide adaptive efficiency in an era of globalisation.

3.4.2 Assumptions on industrial districts' networks

All economic action in industrial districts is embedded in a strong web of network relationships among individuals, firms and institutions. But

beyond the extensive reference to strong networks as a characteristic of industrial districts, the literature on industrial districts is silent about the conditions that are thought to provide adaptive efficiency to industrial districts and competitive advantage to their constituent firms. What is missing in the literature on district networks is a theoretically integrated statement of both the districts' network structure and the relational asset of the firm, and a systematic analysis of the conditions that may lead to specific outcomes.

The review of this extensive literature however indicates considerable ambiguity in the discussion of districts' network structure. Most researchers argue, often implicitly, that all economic activities in industrial districts are embedded in a strong web of socio-economic network relationships among individuals, firms and institutions, without providing an empirical analysis of network structure. Although strong networks are often regarded as synonymous of successful industrial districts, many scholars do not furnish an analytical description of how the districts' network structure affects their competitiveness, and how firms' relational assets provide competitive advantage.

A review of the literature on district networks shows that previous research defines two main categories of networks: business networks and socio-economic networks. Alternatively these two categories have been called "inter-firm networks" and "the entrepreneur's personal networks", "inter-organisational" and "social networks", "formal" and "informal networks", "calculative networks" and "identity-based networks" (O'Donnell et. al., 2001; Hite & Hesterly, 2001;

Johannisson, 1986). In general, business networks are considered at an aggregate level of analysis (as organisational networks) while socio-economic networks are considered mostly in regard to the single entrepreneur (as personal networks). In this sense the network structure of the district is identified to a large extent in terms of business networks, while the relational asset of the firm is often limited to the relational network of the entrepreneur. This clear-cut operationalisation of both the districts' network structure and the relational asset of the firm is however inadequate to faithfully portray the existing relationships amongst the district firms.

Overall, the literature on district networks is severely limited by this dualist approach – business networks (as organisational networks) *versus* socio-economic networks (as personal networks) – that does not allow us to capture the complexity that both the districts' network structure and the relational asset of the firm respectively encompasses. As Hite and Hesterly (2001) in fact suggest, the relational asset of the small firm is a highly dynamic network – during emergence of the firm, the social network of the entrepreneur is virtually synonymous with the relational asset of the firm as network relationships initially exist on the interpersonal level; as the firm starts to formalise interpersonal relationships through routines and procedures, these relationships tend to evolve into inter-organisational relationships that can provide information and resource exchange between organisational entities. According to this perspective, a more comprehensive approach considering this dichotomy – business networks *vs.* socio-economic networks - is therefore needed to better understand both the districts' network structure as well as the relational asset of the firm.

3.4.2.1 Business networks

Business networks are inter-firm relationships consisting of an intense set of backward, forward, horizontal market exchanges of goods, services, information and people (Rabellotti, 1997). Horizontal networks are close inter-firm relations among final-firms and stage-firms, in order to mutually support each other by the common provision of services. Vertical networks are the supply chain of final-firms and stage-firms linked by backward and forward vertical integration.

The main strand of the literature on industrial districts' networks assumes that some of the most fundamental organisational outcomes such as learning, knowledge transfer, job creation, technological innovation, entrepreneurship and performance can be usefully characterised as properties of these business networks rather than attributes of individual firms (Lipparini & Lorenzoni, 2000). The main common task of business networks is to gather, process, and spread information across the system. Such business networks require communication and coordination systems that have low transaction costs and that deliver the required quality of outputs (Nassimbeni, 1998).

Cooperation concerns the relationships between firms, their subcontractors and their suppliers, and helps firms to solve common technical and financial problems. Too much cooperation however, especially among final firms can lead to high levels of inefficiency and slow responses to changing conditions (McDonald & Vertova, 2002). Network theories claim that when market uncertainty increases,

individual firms tend to cooperate more, rather than less, with other firms, increasing their overall volume of market-transactions (Podolny, 1994). Podolny's contribution shows how this involves increased reliance on other firms that are known, trusted and reliable. Under conditions of market uncertainty, factors typically considered as non-economic, such as status, reputation and role position define business networks as individual firms attempt to establish their mutual dependencies. As the entrepreneur/owner/director needs to make decisions in a volatile environment, business networks help to obtain at low cost useful information on which to base these decisions (Mundim et. al., 2000).

However, according to some literature on industrial districts' networks, competition occurs horizontally among firms that are specialised in the same product or in the same activity and it generally stems from quality, design, choice, speed and flexibility of adjustment (Pyke et. al., 1990). Here the beneficial aspects of cooperation are deemed to outweigh any opportunistic behaviour arising from low level of competition when this may occur (McDonald & Vertova, 2002).

Along with cooperation and competition, other features of business networks have increasingly received attention by researchers, especially at the firm level of analysis. Business network size for instance has received considerable attention – studies on network size tend to privilege as a level of analysis the dyadic relations in egocentric networks possibly extended with indirect ties (Johannisson et. al., 1994). Network size is generally thought to be positively correlated with early firm performance (Hansen, 1995). Specifically in

relation to the creation of small firms, a strand of the literature has claimed that the availability and the development of entrepreneurial networks can explain why some individuals start firms and other do not (Aldrich & Zimmer, 1986).

The literature also claims that not only is the business networks' size a significant factor in business success, but also the networks' diversity (Burt, 1992). Such diversity is often assessed in relation to several factors: composition of strong and weak ties (Granovetter, 1985), cohesive networks (Coleman, 1988) and structural holes (Burt 1992, 2001). Research has also led to affirm that building business networks with a large number of indirect ties may be an effective way for actors to enjoy the benefits of network size without paying the costs of network maintenance associated with direct ties (Burt, 1992). Several recent studies have also indicated that the position in business networks might influence firm behaviour and performance. In particular, the relationship between firm position and innovation outcome has been seen as an empirical indicator of the effectiveness of knowledge flows through such networks (Ahuja, 2000). Other determinants are density and reachability (Granovetter, 1985) as well as geographical distance (Curran & Blackburn, 1994). Overall, the specific effect of different elements of business networks on firm performance remains unclear (Ahuja, 2000).

3.4.2.2 Socio-economic networks

In industrial districts, business networks tend to be intertwined to a certain extent with socio-economic networks and economic behaviour and is likely to be, at least in part, shaped by social norms (Rabellotti,

1997; McDonald & Vertova, 2002; McDonald & Burton, 2002). However, notwithstanding the industrial district thesis explicitly identifying the social context in which production is embedded as a crucial factor in explaining districts' competitiveness, network studies of industrial districts only partially address these issues. Within the wide debate on districts' network structure, particular emphasis has been placed on the leveraging of inter-firm relationships regardless of their content - presence or absence of social contents. This view seems somewhat controversial because as we have seen, when market uncertainty and volatility increase, factors typically considered as non economic, such as status, reputation and role position become increasingly important.

Conversely when socio-economic networks are taken into consideration by network studies of industrial districts, social networks are described merely as the social networks of entrepreneurs. Furthermore, the concept of the entrepreneur's social network has been most often employed only in relation to newly created, as opposed to established firms (O'Donnell et. al., 2001).

Within this stream of research, the terms personal network or social network frequently appear in the literature on entrepreneurship and are used by researchers as interchangeable concepts. The use of the social network construct in entrepreneurship rises from the acknowledgement that traditional approaches to the study of entrepreneurship failed to consider the social context (Aldrich & Zimmer, 1986).

Specific to the formation of small, entrepreneurial firms, some researchers have claimed that the availability and development of personal networks can explain why some individuals start firms and others do not (Aldrich & Zimmer, 1986). A more widespread belief is that the information needed to start a business is passed to the small firm entrepreneur through an existing social network of friends and acquaintances (Johannisson & Nilsson, 1989). It is also thought that the personal network of the owner/director is the most important resource upon which he/she can draw in the early days of the firm's development (Hite & Hesterly, 2001).

3.4.2.3 Other organisations

Although the industrial district thesis explicitly recognises the importance of other organisations such as local institutions, the districts' network structure is often considered to a greater extent only in terms of inter-firm relationships. As we have seen previously, institutional and policy factors including a network of public and private local institutions supporting economic agents has been commonly acknowledged as one of the main features characterising industrial districts (Rabellotti, 1997; Schmitz, 2000; Yeung, 2000). However, this important feature is not addressed by the literature in the conceptualisation of the districts' network structure.

According to the literature, "institutional thickness" helps to embed firms in specific localities and to reduce their tendencies for relocation (Amin & Thrift, 1994). Strong institutional presence therefore lowers the risk of "hollowing out" as a result of environmental transformations that globalisation encompasses as well as inducing new firms formation and growth, and it further enhances the competitiveness of

existing firms (Yeung, 2000). Furthermore, the greater social cohesion that fosters adaptability, and which in turn fuels the continuous regeneration of districts' competitiveness, is not an entirely spontaneous outcome. On the contrary, social cohesion is typically the result of conscious concerted action among different local institutions (Dei Ottati, 2002).

A strong institutional presence for instance can play a role in supporting industrial growth and innovation (Rabellotti, 1997). Too much "institutional thickness" nonetheless is not necessarily beneficial for localised firms (Yeung, 2000). Scott for instance argued that *'not all forms of institutional thickness provide an automatic guarantee of economic dynamism'* (Scott, 1998: 110). Despite the difficulties in systematically assessing the effective role played by public and private institutions in industrial districts, some generalisations can be made from some of the successful experiences.

The role of public policy in the Italian and other European districts has received great attention in the literature. Particular emphasis has been devoted to the role of regional and local governments in providing a framework in which industrial districts can flourish and being nurtured (Brusco, 1990; Best, 1990). There is some evidence for example that the growth of the Italian districts has benefited from a national regulatory framework that provides financial facilities and exemptions from administrative burdens for artisans (Rabellotti, 1997). Consistently, the literature also accords a key role to a particular set of private institutions such as business associations, trade organisations and chambers of commerce. These private sector institutions have both the potential and the capacity to promote a sense of shared

group identity and to strengthen the voice of local firms (Yeung, 2000).

In many cases entrepreneurial associations and other institutions such as business service centres also have played a significant role in the provisions of services. Example of services provided are the supply of information, quality control and testing facilities, entrepreneurial and managerial training, translation of tenders, consultancy on fiscal and legal matters, book-keeping and research on foreign markets (Pike et. al., 1990). Most importantly, the institutional presence seemed to have the capacity to upgrade districts' production along the ever-fast pace of innovation and increasing competition, driving the districts forward (Kaplinsky, 2000; Schmitz, 2000). Overall, a tight collaboration between public and private bodies in the definition of firms' needs and in the implementation of the institutional initiatives has been crucial in determining their degree of success (Rabellotti, 1997; Schmitz, 2000).

3.4.3 Theories of Embeddedness

Interest in small firms and their role in national economies has increased enormously over the last twenty years, although explanations of their persistence on the market have radically changed. The view that the small firm is a resource which needs to be strengthened has replaced the traditional idea of a small firm as an anomaly within the industrial fabric. The small firm is now often seen more positively, as the generator of the enterprise economy and as an integral part to economic reconstruction (Curran & Blackburn, 2001).

Research on the small firm has reflected the increased interest and recognition of its contribution to the economy. Particularly during the 1980s, most of the literature attempting to explain its unexpected presence has focussed on small firm territorial specificity. Observers have often stressed the close link between small firms and local community (Bagnasco, 1977; Conti & Julien, 1981; Garofoli, 1982). However, within the conventional view of the small firm and local community, territoriality and social dimensions find an unbalanced equilibrium: while the territorial specificity has been extensively discussed, little effort has been made to fully explore the importance that the social dimension encompasses.

During the 1990s, the literature on small firms seems to accord a more privileged role to its social environment. Within the mainstream-view, however, there is just a tacit acknowledgement that economic activities are only part of the wider social relations in which people engage. Traditionally in fact, the economic aspect has often been over-emphasized at the expense of social, political and non-economic issues (Curran & Blackburn, 1994).

At a broader level, the assumption that economic action is deeply embedded in social structure has revived debates about the positive and negative effects of social relations on economic behaviour. While most organizational theorists affirm that social structure plays a significant role in economic behaviour, many economic theorists hold that social relations minimally affect transacting by shielding the transaction from the market (Peterson & Raghu, 1994). These

diverging views indicate a need for more research on how social structure supports or derails economic action (Uzzi, 1997).

Furthermore, the inadequacy of the marginal position accorded to social structure is particularly visible since today, having abandoned the promise of social engineering, many observers argue that economic prosperity and democracy depend on a healthy and dynamic civil society for their vitality (Fukuyama, 1995; Giddens, 1998). On the basis of this alternative approach, we can assume that *all* the relationships which small firms engage within the local community – from canonical business relationships traditionally characterised by the total or partial absence of social contents, to socio-economic relationships that are driven by social aims – that might as well affect organisational performances. In this perspective, not only ordinary business relationships but also socio-economic relationships developed within local sport clubs, local political party activities or religious groups are susceptible to be seen as socio-economic networks for achieving competitive performances. They might in fact offer potential vehicles for economic linkages within a determined territoriality or they might strengthen the existing ones (Curran & Blackburn, 1994).

Conversely, economic activities may help promote and sustain non-economic activities. Firms' social clubs, for instance, have often been much more than simply meeting places for their employees. A healthy relationship between business and local community seems to represent a fertile ground for constructive partnerships in order to achieve sustainable business as well as sustainable development. Such a relationship may translate into better access to resources and more

influence during policy debates and increased support from community based organisations which are both critical components of a successful business initiative (Dasgupta & Sarageldin, 2000).

Polanyi (1957) introduced the term "embeddedness" in *'The Great Transformation'* and is typically presented as the originator of this concept. However, many theorists attempted to work out alternative and more comprehensive frameworks for the study of economy and society than those generated by the neoclassical economists.

In particular Granovetter's (1985) essay serves as a more proximate and accessible stimulus for modern research on embeddedness. What this study has plainly shown is that economic institutions are embedded in wider social relationships to the extent that they are spatially bound by these relations in their locational and labour strategies, as well as constrained by the influence of proximity in their innovation activities. In this perspective, firms are not conceptualised as merely economic machines responding to external market and cost conditions, but rather as social constructions by individuals *'whose action is both facilitated and constrained by the structure and the resources available in the social networks in which they are embedded'* (Granovetter, 1991: 78).

Granovetter further argues for attention to the interplay between social structures and economic activity in industrial societies because *'all market processes are amenable to sociological analysis and that such analysis reveals central, not peripheral, features of these processes'* (Granovetter, 1985: 505). However, even though

Granovetter's argument usefully explains the difference between economic and sociological paradigms of economic behaviour, it lacks a concrete account of how social relations affect economic exchange (Uzzi, 1997).

More recent studies on embeddedness have been based on the methodological focus of event history and network analysis techniques. Network analysis (Wasserman & Faust, 1994) and event history methodologies (Strang, 1991) have allowed researchers to study a wide variety of issues and examine different social structures and consequences of relational arrangements. Given the dominance of research tradition on inter-actor ties, this area has made significantly more methodological progress than theoretical advances. These advances are motivated primarily within the context of the formation of ties and the persistence of ties, while little is known about how embeddedness in networks affords more proximate performance outcomes, such as firms' greater profitability, sustainable advantage or enhanced social performance (Dacin et. al., 1999).

An important contribution in this direction comes from Uzzi. In analysing embeddeded ties, he envisages how their properties create competitive advantages for firms and networks of firms. Similarly to Polanyi, in his ethnographic study Uzzi finds that in the apparel industry at least, atomistic relations govern some transactions; while like Granovetter, he finds that '*atomistic relations occupy a confined area of economic life and that critical transactions on which firms depend most are embedded in networks of social relationships that produce positive and unique outcomes that are difficult to imitate via*

other means' (Uzzi, 1997: 64). More precisely, embedded ties have three main "mechanisms of coordination" that regulate both expectations and behaviours of exchange actors: trust, fine-grained information transfer and joint problem-solving arrangements. Uzzi's contribution is also significant methodologically in identifying features and functions of embedded exchange. Particular emphasis has been placed on personal relationships, trust, reputation, reciprocity, lack of opportunism and many others factors that are seen as distinctive features of embedded ties. Although the list of factors characterising embedded ties does not seem exhaustive, it provides a useful framework for distinguishing between arm's-length ties and embedded ties and for analysing different "mechanisms of coordination" that are associated with them (Uzzi, 1997).

In particular, the level of embeddedness of the firm is expected to lower transaction costs and to facilitate exchange (Soda & Usai, 1999). According to Uzzi, embedded firms enjoy higher survival chances than less embedded firms (Uzzi, 1996). Similarly Larson reports that embedded firms have access to "thicker information" on strategy, production, know-how and profit margins and therefore develop distinctive ways of learning and integrated production (Larson, 1992). Provan and Human (1999) show for example that when firms become embedded, by interacting on regular basis with network actors, they develop a distinctive way of learning. Learning in this context is defined *'as the capacity of network member firms to enhance their awareness of both competition and their own competitiveness'* (Provan & Human, 1999: 186). Table 3.6 summarises the main "mechanisms of coordination" that have been identified by the literature as well as the main benefits that are associated with them.

Table: 3.6: Mechanisms of coordination associated with embedded ties	
Mechanisms of coordination	**Main benefits**
Trust	Reputation Lower transaction costs Higher survival rate Thicker information A distinctive way of learning to enhance competitiveness
Fine-grained information transfer	
Joint problem-solving arrangements	

As embeddedness creates, on the one hand, economies of time and allocative efficiency, investments, complex adaptation and Pareto improvements; on the other hand, the same process by which embeddedness creates a requisite fit with the current environment can paradoxically reduce a firm's ability to adapt (Uzzi, 1997). If a firm becomes too embedded, its adaptation becomes more difficult as network relationships are rooted in specific patterns, isomorphism within the network decreases diversity, and a dense level of exchange with the same partners reduces information and access to new opportunities (Burt, 1992).

In this sense, the theory of embeddedness reveals a major caveat. Embeddedness in industrial districts is theoretically indeterminate, because it leaves open the possibilities of both inertia and change. Social embeddedness is in fact a variable and its causes and consequences are contingent on circumstances which may be highly place specific (Staber, 1997). The fundamental statement that

economic action is embedded in ongoing social relationships that at times facilitates and at times obstructs economic exchange therefore suffers from a theoretical indefiniteness (Uzzi, 1997).

In relation to industrial districts for instance, the level of embeddedness of the exchanges is thought to have profound impacts on industrial districts flexibility (Staber, 1997). A large number of case studies of industrial districts supports the argument that, particularly for small firms, embedded networks are not only capable of replacing the market in managing the relationships of economic exchange, but also manage to optimise the coordination between different industrial activities (Mistri & Solari, 2001; Nassimbeni, 1998).

Because of the combination of the advantages of organisational hierarchies with the flexibility of informal relationships, embedded networks are thought to be most flexible in fragmented and volatile industries. Evidence proves that increasingly strong competition and trends toward market globalisation induce the firms located in industrial districts to progressively find more sophisticated forms of cooperation in order to reinforce their closed systems of exchange and to preserve their external economies. Schmitz for instance demonstrates how the export-oriented industrial district in Sinos Valley (Brazil) has stepped up internal cooperation in response to intensified global competition in leather footwear (Schmitz, 1998). Similarly Rabellotti provides empirical evidence that following trade liberalisation, the cooperative behaviours amongst indigenous firms located in the footwear district of Guadalajara has visibly increased both horizontally and vertically (Rabellotti, 2001).

By becoming more embedded the industrial district seeks to preserve what has been termed as its "topological stability" (Mistri & Solari, 2001). In particular, it is the dual nature of embedded networks that provides industrial districts with adaptive efficiency: as long as any fundamental changes do not occur in its socio-economic structure, the industrial district maintains its topological stability, by which changes can take place without the "district form" being lost as the result. In other words, embedded networks sustain the topological stability of the district by virtue of which the district promptly and effectively adjusts to dramatic changes of its competitive environment.

Conversely, if a district becomes too embedded, its ability to adapt is reduced as network relationships are tuned to specific actors. Isomorphism within the networks decreases heterogeneity amongst firms and a concentrated level of exchange with a reduced number of firms produces redundant information and reduces access to new opportunities (Uzzi, 1997). Redundancy in particular occurs by the effect of forming multiple relationships that duplicate information (Staber, 2001). Under these conditions, the district becomes "rigid" as opposed to "flexible" and adaptively inefficient to respond to the needs of its competitive environment, ultimately leading to decline.

The key implication of these findings is that the level of embeddedness produces distinctive positive economic outcomes. In this specific case, it is by being embedded in the district that firms can enjoy particular mechanisms of coordination - the benefits of both "hard" and "soft"

external economies such as economies of scale and scope as well as economies of learning and creativity (Bellandi, 2003).

3.5 Conclusions

Since the seminal work of Alfred Marshall, scholars have placed different emphasis on the different attributes that industrial districts might posses. The aim of the first part of the literature review was to define the conceptual boundaries of the industrial district definition and provide a taxonomy of industrial districts and clusters. The empirical literature on industrial districts has highlighted a multifaceted world of industrial districts and local agglomerations, offering many rich insights on their network structure but is far from providing a rigorous comparative approach. The lack of consensus on what constitutes a cluster or an industrial district has generated a terminological melting-pot which blurs the boundaries of the phenomena under investigation. Clarification of the various definitions of industrial districts was therefore deemed as necessary for several reasons. First, because, as suggested by the "semantic ambiguity" made the concept difficult to be operationalised. Second, definitions matter because considering the Marshallian Italian industrial district as a dominant paradigmatic model seemed an excessively myopic perspective. Third, it emerged from the literature that industrial districts tend to change over time, hence attributing a crystallised set of attributes to these ever-changing agglomerative productive phenomena was of limited value.

For these reasons, the present research has decided to focus on those attributes that find a wider consensus in the literature and that are likely to be present over time: the geographical concentration, sectoral

specialisation and the presence of business networks. These are the "minimal requirements" that according to the literature underpin the network structure of industrial districts. Furthermore, focussing on those common sets of criteria allowed us to classify industrial districts according to those structural features that may support them in facing the "globalisation challenge". To this end, in line with the taxonomy introduced by McDonald & Vertova (2002) we made a distinction between two types of industrial districts: whereas industrial districts type I are those that are only engaged in business networks, industrial districts type II those that are engaged in socio-economic networks and resemble the Marshallian industrial district.

Also drawing on the industrial district thesis, the second part of the literature attempted to shed some light on industrial districts' dynamics. In line with Garofoli's study (1983) the present research has identified two main foci on change processes – *endogenous change* and *exogenous change*. To this end, section 3.3 reviewed the most influential contributions that have dealt with these two issues and its aim was to identify the main factors that potentially could modify the configuration of industrial districts. The different factors were assessed in relation to the different dimensions of the "ideal type" of industrial industrial district introduced in Chapter II. Following this classification where some factors were strictly correlated to others, it emerged that we still need to reach a full understanding of how endogenous and exogenous process interact together in changing industrial districts, hence the need to avoid looking at endogenous and exogenous factors in isolation.

Since many industrial district scholars consider networks as a key concept in their research, the third part of the literature review looked at network theories. Despite the extensive reference to strong networks as a characteristic of successful industrial districts, the vast literature on industrial districts is silent about the conditions that were thought to provide adaptive efficiency to industrial districts and to provide their constituent firms with a competitive advantage. Although network theories could effectively complement and counterbalance the descriptive level of analysis provided by the industrial district thesis, by providing a more rigorous definition of both "business networks" and "socio-economic networks", they displayed a major pitfall. More precisely, network theories are limited by this dualistic approach that induces the researcher to look at these networks in isolation hence preventing any substantial assessment of their interaction. To this purpose, the theory of embeddedness filled this gap by introducing an analytical tool, *the relational asset of the firm* which simultaneously is able to capture *all* the relationships which small firms engage – from canonical business relationships traditionally characterised by the total or partial absence of social contents, to non-economic relationships that are driven by social aims – that might affect organisational performances.

In light of these considerations and by merging these two streams of literature – industrial district thesis and network theories - a more comprehensive theoretical framework will be proposed in Chapter IV.

CHAPTER IV THEORETICAL FRAMEWORK

4.1 Introduction

The enormous investment in time and effort committed during the last twenty years to understand and promote industrial districts has not led to the realisation of their full theoretical and practical potential. Conversely, the value of network theories to explain a wide range of organisational phenomena has been well documented by the literature, in particular the opportunity of coupling network theories with the industrial district thesis as a viable option to produce fruitful insights about both network structure and the relational asset of the firm has been shown.

However, beside the consensus that networks matter and beyond the widespread reference to dense networks as characteristic of successful industrial districts, many investigators are surprisingly ineloquent about the conditions that are thought to provide adaptive efficiency to industrial districts and competitive advantage to their constituent firms. In particular, we have seen how the paradox of embeddedness is theoretically indeterminate, because it leaves open the possibilities of diverging outcomes. Table 4.1 summarises the different concepts previously identified and discussed throughout the literature that inform the theoretical framework. A more thorough discussion of the operationalisation of the units of analysis will be provided in sections 4.4.1 and 4.5.1 in relation to the industrial district and the small firm, respectively.

Table 4.1: How the literature informs the theoretical framework

Globalisation	The industrial district literature	Network theories	Theories of Embeddedness	Theoretical Framework
Definition	**Definition**	**Definition**	**Definition**	**Definition**
A moderate outlook of globalisation	A "workable" definition of industrial district	A more rigorous description of network structure		District network structure
	Main elements	**Main elements**		**Main elements**
	Geographical concentration			Geographical concentration
	Sectoral specialisation			Sectoral specialisation
	Business networks	Business Networks	The relational asset of the firm	Backward, forward, horizontal and vertical linkages Linkages with other organisations
	Socio-economic networks	Socio-economic Networks		
Change	**Change**		**Change**	**Change**
The spatial dimension	Spatial and geographical factors			Adaptive efficiency
The political dimension	Institutional factors			Competitive advantage
The socio-cultural dimension	Socio-cultural factors		The paradox of embeddedness	Competitive strategy
The economic dimension	Economic and organizational factors			

What is striking in the literature on industrial districts is the absence of a theoretically integrated statement of network structure and a

systematic analysis of its characteristics that may lead to competitiveness. A common criticism of industrial districts research has been the lack of systematic empirical studies in order to assess propositions and assumptions that have been too often implicitly assumed and taken for granted.

As such, there is an opportunity for applied, empirical research into the applicability of network theories to the industrial district thesis. In particular, network theories and theories of embeddedness represent a solid stimulus for embarking on an in-depth analysis of the conditions under which certain network structures may lead to adaptive efficiency and to assess whether the relational asset of the firm can still provide competitive advantage in an era of globalisation.

To this end the research questions and research objectives as well as the distinct levels of analysis will be discussed in section 4.2. Specifically, three levels of analysis will be developed: the sector, the district and the firm. The research endorses the assumption that different concomitant perspectives might realise a fuller understanding of these issues as well as providing new and otherwise inaccessible insights. The sector is an influential level of analysis as different sectoral settings offer different ranges of opportunities to both industrial districts and their constituent firms. As will be discussed in section 4.3, globalisation clearly modifies the competitive environment of industrial districts, but also reshapes the borders of their networks forcing industrial districts to rethink their strategic positioning in the global value chain.

Section 4.4 will introduce the second level of analysis - the district level of analysis. Drawing on the workable definition of industrial district as well as its derived taxonomy previously discussed in Chapter III section 3.2.5, first the notion of network structure will be more rigorously operationalised, then some considerations on industrial districts' dynamics will be put forward. Since industrial districts tend to respond in different ways to the dramatic changes in their competitive environment, identifying a suitable unit of analysis is crucial to assess possible common patterns and possible future trajectories.

Section 4.5 will introduce the third level of analysis. Given the wider opportunities provided by industrial districts to small firms, it is important to understand small firms not only in respect of the strategic choices that they might implement collectively, but also according to their individual patterns of action. In addition, since industrial districts tend to display a relatively heterogeneous fabric, made up of different sizes and at different stages of their development where entrepreneurship often plays a significant role, the relational asset of the firm is considered a relevant unit of analysis. Drawing on the literature discussed in Chapter III, sections 3.4.2 and 3.4.3, first the notion of the relational asset of the firm will be operationalised, then some consideration of the dynamic composition of its networks will be presented. Section 4.6 will attempt to draw all these different concepts together, trying to draw them into a more encompassing theoretical framework. Throughout this exercise, we will illustrate some preliminary considerations on the limitations and the opportunities provided by the theoretical framework adopted. Finally some conclusions will be provided in section 4.7.

4.2 Research questions and research objectives

The present research addresses the broad theme of the viability of industrial districts in dealing with dramatic changes in their competitive environment. In particular, the multidisciplinary character of globalisation, meant as a political, economical and social change that finds its roots in a changing geography, seems particularly significant for industrial districts, whose theoretical foundations rely on a delicate balance between these factors. In the light of these changes we have seen how some observers express doubts about the viability of industrial districts as organisational forms of production that rely on strong networks, developed over time and in geographical proximity (Amin & Thrift, 1994; Harrison, 1994; Harrison et. al., 1996; Berger & Locke, 2001; Nassimbeni, 2002; Guerrieri & Pietrobelli, 2000).

More precisely, the research seeks to assess the role of industrial districts as a viable organisational strategy for small manufacturing firms to compete globally. In particular, as increasingly diversified patterns of growth are emerging and different avenues are followed by industrial districts in order to face globalisation, more attention should be paid to industrial districts response to global competition. How do global forces shape industrial districts in different ways? As globalisation displays a complex and heterogeneous distributional pattern, unveiling its logics constitutes a primary concern.

Based on a cross-national comparison this research attempts to shed the light on the formulae or "recipes" for both success and decline in two well established industrial districts in Britain and Italy. In order to provide a more profound understanding of the factors underpinning the competitiveness of industrial districts, their respective network

structures will be compared. The aim is to provide a theoretically integrated statement of network structure and a systematic analysis of the conditions that may lead to adaptive efficiency for the district as a whole.

Additionally, since industrial districts tend to display a relatively heterogeneous fabric, made up of different sizes and at different stages of their development where entrepreneurship plays often a significant role, the relational asset of the firm is considered a relevant unit of analysis. We have seen how theories of embeddedness place a different emphasis on the relational asset of the firm, by overcoming the traditional twofold dichotomy between business networks (as organisational networks) and socio-economic networks (as personal networks). Therefore, the relational asset of the firm appears as a "new interpretative lens" through which to analyse the resilience of industrial districts to cope with the dramatic changes occurring in their competitive environment.

To this end, a further concern of this research is to reconceptualise the district network structure, in order to re-evaluate how small firms interact with their environment focussing on business relationships and their eventual link with socio-economic relationships. Is the relational asset of the firm still a source of competitive advantage? The aim of the research is to provide a theoretically integrated statement of the relational asset of the firm and a systematic analysis of the conditions that may lead to a competitive advantage for the single firm.

To address these issues, the research considers three levels of analysis, namely the sector, the industrial district and the small firm

(see table 4.2). Because of the particular nature of industrial districts, these three levels of analysis are closely intertwined. Most published studies have considered one or two levels and marginally acknowledged the impact of the others. This research endorses the assumption that different concomitant perspectives might realise a fuller understanding of these issues as well as providing new and otherwise inaccessible insights (Bull et. al., 1993; Staber, 2001).

Table 4.2: Levels of Analysis		
Level of analysis	**Research Question**	**Research objective**
Broad domain	How do industrial districts deal with dramatic changes in their competitive environment?	To establish the resilience of industrial districts as organisational forms of production that rely on strong networks developed over time and in geographical proximity.
The sector	Are industrial districts a viable strategy for small manufacturing firms to compete globally?	To establish under what conditions a relatively traditional sector of industry can still survive and prosper in spite of global competition.
The industrial district	How do global forces shape industrial districts in different ways?	To provide a more profound understanding of the factors underpinning the competitiveness of industrial districts. To provide a theoretically integrated statement of network structure and a systematic analysis of the conditions that may lead to adaptive efficiency for the district as a whole.
The firm	Is the relational asset of the firm still a source of competitive advantage?	To provide a theoretically integrated statement of relational asset and a systematic analysis of the conditions that may lead to a competitive advantage for the single firm.

4.3 The sector

As briefly discussed in Chapter III section 3.3.3 when describing industrial districts' dynamics and the different determinants of exogenous change, sectoral trends bear profound implications for the viability of industrial districts. The sector is in fact an influential level of analysis since it determines in large measure the necessary skills and status of industrial districts and therefore has important implications for their adaptive efficiency. Adaptive efficiency is the ability of industrial districts to promptly and efficiently adjust to dramatic changes in their competitive environment. As the literature on globalisation emphasises, globalisation is sector-related, and it is therefore necessary to understand the basic characteristics of the particular sector, i.e. the footwear sector, in order to adequately assess the impact of globalisation and its implications for industrial districts.

Different sectoral settings offer different ranges of opportunities to both industrial districts and their constituent firms. The underlying assumption is that different performance amongst European countries should be located in a broad framework taking into account sectoral factors, both external and internal demand conditions, and the particular strategies of national industries. This implies that particular assets of dedicated equipment, skilled labour and know-how in industrial districts might vary when investigated over the long term. The transient nature of these organisational forms of production has profound implications for the assessment of their future viability (Bull et. al., 1993; Lasserre, 2003).

Footwear, for example, is a mature sector being subjected to the "dematuring" impact of automation and communication technologies. Mature sectors generally experience fragmenting demand as consumer needs become more sophisticated. An increasingly fragmented demand is detrimental to mass production methods, allowing small firms to address specialised needs by differentiating themselves along both market and product dimensions. In this context, market knowledge of fashion trends or specialised performance requirements become crucial variables for competitive success and adaptive efficiency (Pambianco, 2000). Since sectoral trends bear important implications for the adaptive efficiency of industrial districts, these issues clearly indicate the need to fully appreciate the context imposed by the industrial sector under study.

4.3.1 The footwear sector: a value chain perspective

Are industrial districts a viable strategy for footwear firms to compete globally? This section will discuss under which conditions a relatively traditional sector of the industry such as footwear can still survive and prosper in spite of global competition. Footwear bears the characteristics of a typical low-skill intensive manufacturing sector where comparative advantage has decisively shifted to low-wage labour countries. As the literature on globalisation emphasises, globalisation is sector-related therefore an in-depth analysis of the main features of the sector is needed in order to adequately assess the impact of globalisation and its implication for industrial districts. To this end, in order to provide an exhaustive overview of the crucial

issues affecting the sector as the direct result of the increasing process of globalisation, a value chain perspective will be adopted[9].

The value chain describes the full range of activities which are required to bring a product or service from conception, through the intermediary phases of production, delivery to final consumers, and disposal after use (Kaplinsky, 2000). From an analytical point of view, the value chain perspective is useful because the focus moves from manufacturing only to the other activities involved in the production of good and services, including distribution and marketing. This perspective conveys the notion of an interconnected production and processing chain in which goods produced at the upstream end (e.g. components) are passed on to downstream manufacturers for conversion into the final product (e.g. shoes). The choice to embrace this approach responds to the need for a dynamic theoretical framework, through whose lenses it is possible to systematically describe the ongoing changes that inevitably are occurring within the footwear industry.

---

[9] The concept of value chain analysis was used in the 1960s and the 1970s by analysts charting a path of development for mineral-exporting economies. It was also adopted in recent French planning literature in the form of the "filiere". During the 1990s, value chain analysis has been widely used and one of the primary sources of its recent prominence arises from the work of Michael Porter, who identifies "value chain" and "value system" as key-constructs necessary for the upgrading of national capabilities (Porter 1985, 1990). Recent developments of the value chain framework have begun to provide a more robust analytical structure which might provide important insights on global income distribution and the identification of effective industrial policy levers to contrast the ongoing process of unequalisation (Kaplinsky, 2000).

Because of the advent in technology, and as production is increasingly becoming more automated, it is also losing ground in terms of economic importance. In the last couple of decades the footwear sector, like other traditional labour-intensive sectors, underwent major changes, as emerging countries have been gradually displacing industrialised countries as suppliers of labour-intensive goods (Amighini & Rabellotti, 2003). As more and more countries have developed their industrial activities, so barriers to entry in production have fallen and their relative competitive advantage has been heightened. Consequently, the primary economic rents in the chain of production are increasingly to be found in areas outside production (Kaplinsky, 2000). In the footwear sector for instance, in the past the prime source of economic rent was constituted by raw materials and assembling while today design, buying and retailing appear to be amongst the most profitable links of the chain. The following table shows the dynamic distribution of rent across the footwear value chain.

There are clearly still gains to be realised in production, as is evidenced by the continued presence of both large and small Italian manufacturers. The production skills involved to compete on high-price range casual footwear are in fact highly craft-oriented and are closely allied to the design skill of the Italian industry (Pambianco, 2000). In this context, design is a very critical factor when facing increasing competition (Kaplinsky, 2000). Similarly, buying agents, many of whom were formerly manufacturers but were forced out of the market by the growing competition, have played a proactive role in creating the competition which erodes rents in this loop of the chain (Kaplinsky, 2000).

Table 4.3: The footwear value chain

	Links in value chain	Prime source of economic rent			Implications for production activities
		Past	Present	Future	
Footwear	Leather	Leather			
	Design		Design	Design	Design is critical as increasing competition in production forces declining terms of trade
	Assembly	Assembly			
	Exporting				
	Buyers		Buying	Buying	Buyers play a dominant role in global sourcing
	Retailing		Retailing	Retailing	Brand names of growing importance

(Source: Kaplinsky, 2000)

This is what Gereffi (1999) and Ernst (2000) have called the "global production network" to describe a world in which shifting competitive advantage leads to a situation where manufacturers, forced out of the market because of the intense competition, become "governors" of production destined for third markets.

Within value chain analysis, the term "governance" has been coined by Gereffi to indicate those key actors in the chain who are responsible for the inter-firm division of labour and for the capacities of certain actors to upgrade their activities (Gereffi, 1994). Building on this concept of governance, Gereffi draws a distinction between two types of value chains: "buyer-driven" chains are those where the critical

governing role is played by a buyer, whilst "producer-driven" chains are those that are governed by producers. The former type of chain is characteristic of labour intensive industries such as furniture, clothing, toys and footwear. The latter describes a market where key producers in the chain, generally exploiting vital technologies, play the role of coordinating the various activities (Gereffi, 1994)[10].

A study of the footwear sector in Brazil, for example, shows that following the development of Brazil as a key source of supply during the 1970s and the 1980s, one prominent buyer also systematically cultivated production capabilities in China in the 1990s (Kaplinsky, 2000). A similar pattern has occurred with Hong Kong clothing entrepreneurs now playing a key role in Mauritius, and with Italian shoe manufacturers in Romania. In both clothing and footwear, for example, Taiwanese manufacturers who initially displaced producers in the US and Europe, have been themselves displaced by even lower cost production from China.

Within this scenario characterised by an increasing proportion of output likely to be sourced from developing countries and newly industrialised economies, branding is growing in importance as a guarantee (taken with the price) of a level of quality associated with the brand name. Branding has a crucial role to play especially in the

[10] Extending Gereffi's work, Kaplinsky distinguishes three forms of governance, based on principle of civic governance (Kaplinsky, 2000). "Legislative governance" is the basic rules which define the conditions for participation in the chain. "Judicial governance" is rather that activity of auditing performance to check their compliance with these rules. "Executive governance" is a form of proactive governance which provides assistance to value chain actors in meeting these rules.

casual footwear where the buyer can generally make only a very limited judgement of the quality as the product of one firm looks much like that of any other firm within a given price range (Nera and Berwin & Co., 1999). This illustrates how competitive advantage is particularly dynamic in the footwear industry, shifting not only in from one country to another, but also from production to design and branding.

But what are the options available to industrial districts? The literature on value chain analysis demonstrates that in the footwear sector, upgrading is essential for any industrial district seeking to raise its competitiveness. Both product and process upgrading represent a suitable option. The former involves moving into more sophisticated product lines whilst the latter consists of transforming inputs into outputs more efficiently by re-organising the production system or introducing superior technology (Giuliani et. al., 2003). Functional upgrading is acquiring superior functions in the value chain, such as moving the "core activity" from production to design or marketing (Humphrey & Schmitz, 2002). Intersectoral upgrading is applying the competence acquired in a particular function to move into a more knowledge-intensive sector (Giuliani et. al., 2003).

Downgrading might represent another possible strategy as the experience of the Brenta's footwear district seems to prove (Rabellotti, 2001). In order to be part of the global chain, the district accepted a functional downgrading, abandoning design and marketing and focussing on production. By downgrading however the district becomes more exposed to global competition as it establishes its domain on a link of the chain where entry barriers are more likely to fall. When downgrading is no longer possible, squeezing wages represents a

further option. Squeezing wages for instance is often adopted in labour intensive sectors where workers have little collective bargaining power. The risk is such that the industrial district may engage in a dangerous race to the bottom, which Kaplinsky terms as "immiserising growth" which will lead the district to industrial decline (Kaplinsky, 2000).

4.4 The industrial district

Drawing on the literature discussed in Chapter II, we identified four main dimensions of globalisation that were deemed as relevant for industrial districts as well as the proxies that were considered relevant to assess their viability. Table 4.4 summarises those arguments.

In order to address these issues, a good starting point is to conceptualise the industrial district so that we will be able to conduct a more empirical assessment of those proxies. In recent literature on the global economy, the concepts of network and networking have become familiar terms. Network theories as have been applied by sociology (Coleman, 1988; Burt, 2001), economic sociology (Zunkin & Di Maggio, 1990; Uzzi, 1997), economic geography (Yeung, 2000) as well as by many organisational studies (Lazerson & Lorenzoni, 1990, De Toni, Nassimbeni & Tonchia, 1995; De Toni & Nassimbeni, 1996; Nassimbeni, 1998;) represent a useful starting point to address all the issues, both of network structure and the relational asset of the firm, that have been either partially developed or neglected by the industrial district literature. As shown by Hornik (1993), network models are universal approximations of input-output connections for both linear and non-linear relationships.

Table 4.4: Globalisation			
Globalisation Key-dimensions	**The "ideal type" of industrial district (Rabellotti, 1997)**	**The viability of industrial districts - issues raised**	**Proxies identified by the literature discussed in Chapter II**
The spatial dimension	Location and spatial factors	Organisation and location of industrial districts?	Birth/evolution How the industrial districts sustain its competitiveness over time
The political dimension	Institutional and policy factors	Governance? "Democratic globalisation" *vs.* "Elite globalisation"?	Governance How different forms of governance are built
The socio-cultural dimension	The socio-cultural factors	Relationships that transcend geographical borders?	Geographical proximity The importance of relationships
The economic dimension	Economic and organisational factors	Threats and opportunities?	Innovation patterns Interaction with MNCs Interaction with foreign firms Spill-over effects

Conceptualising the districts' network structure as a hyper-network is also useful since its structure can be defined as a set of heterogeneous actors (e.g. both firms and other organisations) and the set of their relationships representing their business and socio-economic relationships (if any). In this context the districts' network structure is defined as the hyper-network of the relational assets of its constituents firms.

Conceptualising the industrial district as a hyper-network presents several advantages. First, a network can be simultaneously used as a theoretical conceptualisation as well as a methodological approach to analyse empirical data on organisations; second, a network represents an interpretative lens that permits the analysis of relationships both within organisations (i.e. industrial district) and amongst organisations (i.e. firms and other organisations); finally, the network approach allows us to address in an innovative way the definition of the unit of analysis (i.e. network structure and relational asset of the firm) (Lomi, 1991).

This research endorses the assumption that network structure constitutes a strategic asset by which both adaptive efficiency and competitive advantage can be achieved. From here, it follows that there is the need to analytically deconstruct both the network structure of the industrial district and the relational asset of the firm (section 4.5.1) in order to shed light on the logics behind their interplay.

4.4.1 The network structure of the industrial district

Drawing on the workable definition of the industrial district discussed in Chapter III, the network structure of the industrial district, comprising what were deemed as the "minimal requirements" (spatial concentration, sectoral specialisation and business networks), can be further deconstructed. In particular, business networks and socio-economic networks (if any, as in the case of industrial districts type II) could be assessed by investigating the nature of backward, forward and horizontal linkages, as well as by looking at the nature of linkages

between firms with public and private organisations. The following table provides a visual representation of this further deconstruction.

Table 4.5 : The network structure of the industrial district

A workable definition of industrial district	**The network structure of the industrial district**
Spatial concentration	Spatial concentration
Sectoral specialisation	Sectoral specialisation
Business networks	Backward linkages Forward linkages Horizontal linkages Linkages with other organisations
Socio-economic networks (if any as in the case of industrial districts type II)	

Since the existence of spatial concentration, sectoral specialisation and business networks constitute a common feature of both industrial districts type I and type II, the investigation of the network structure will also focus on the level of embeddedness of backward, forward and horizontal linkages and linkages with other organisations as well as their implications for the adaptive efficiency of the industrial district as a whole. In particular, two dimensions that have been traditionally neglected by both descriptive and empirical studies on industrial districts will be addressed: the impact of change (due to endogenous and exogenous causes) and the heterogeneity of actors.

As for the impact of change, as the literature review in Chapter III shows, within the industrial district thesis, industrial districts' dynamics are only discussed in relation to either endogenous change or exogenous change and we still have a limited understanding of how these processes of change can jointly alter the network structure of

industrial districts. In particular the literature shows clearly how exogenous change, often induced by external actors, should be taken into account when investigating districts' network structures as it bears profound implications for the competitive strategy of both industrial districts and their constituent firms. To fill this gap, the district network structure is considered as an "open network structure" rather than self-contained. As noted earlier in section 4.3, many authors have already shown that globalisation clearly modifies the competitive environment of industrial districts and also reshapes the borders of their networks, forcing the district to rethink its positioning in the global value chain. As industrial districts tend to respond in different ways to the dramatic changes in their competitive environment, identifying common patterns and possible trajectories is increasingly crucial.

As for the heterogeneity of the actors, empirical studies of industrial districts tend to assume that industrial districts consist of a very homogeneous fabric made of small and medium sized firms. Yet, this representation is very often stylised as it has been argued that industrial districts tend to display a wider variety of actors. Besides small firms, various actors actively participate in industrial districts: larger district firms, subsidiaries of multinational corporations and a broad range of both private and public actors. Network theories for instance demonstrate how heterogeneity - the structural differentiation of a network composed by actors with different skills and competencies - enriches the information of the district as a whole and its innovative capacity (Staber, 2001). These issues clearly show how heterogeneity should be taken into account when investigating districts' network structures as it bears important implications for both

adaptive efficiency, competitiveness of constituent firms and to a greater extent, for the competitive strategy of the district as a whole.

To fill this gap, the district network structure is considered as a "heterogeneous network structure". The heterogeneity of actors within the districts, and therefore the possibility that their linkages may affect both adaptive efficiency of the district and the competitive advantage of its constituent firms, is taken into account. Once having defined the district network structure for the analytical purposes of this research, we need to establish first how it responds to both endogenous and exogenous sources of change. More precisely, drawing on Chapter III section 3.3, we need to assess how backward, horizontal, forward linkages as well as linkages with other organisations are interacting with these sets of variables. Table 4.6 summarises the four main dimensions previously identified by the literature and the relevant proxies associated with them.

Table 4.6: Industrial districts' dynamics

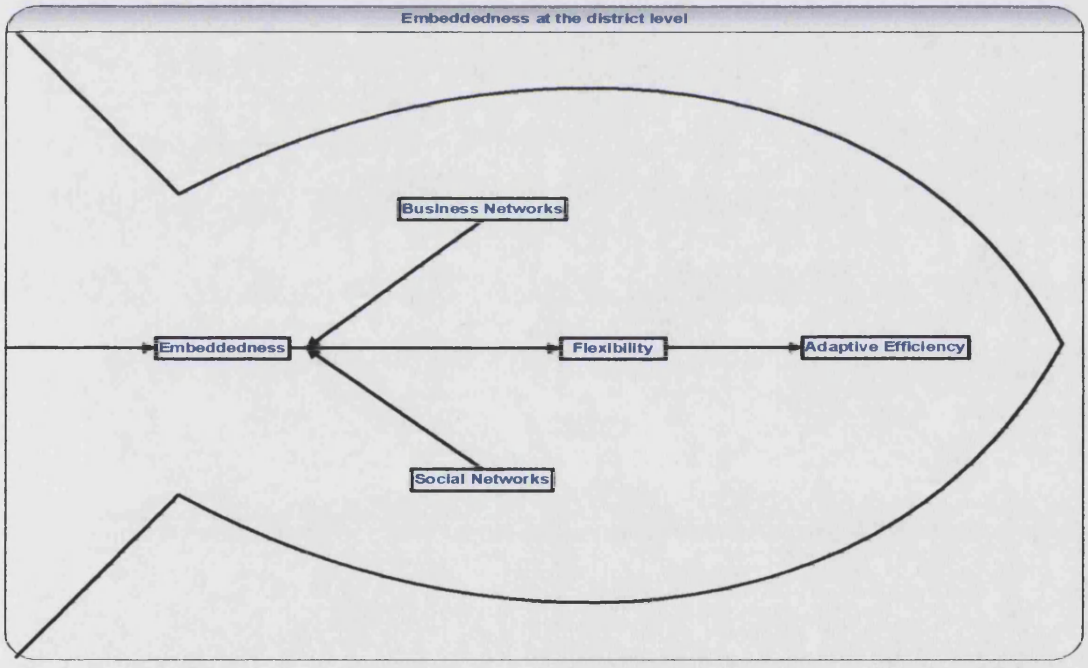
The "ideal type" of industrial district (Rabellotti, 1997)	**Endogenous change**	**Exogenous change**	**Proxies identified by the literature discussed in Chapter III**
Location and spatial factors	Lack of skilled labour Increase of wages Lack of infrastructures Intra-cluster trade flows	Change in cost structure and technology International trade flows	How different degrees of geographical proximity affect the district network structure
Institutional and policy factors	The transformation of the local institutional structures	Trade regimes National currencies	How a different institutional presence affects the district network structure
The socio-cultural factors	Change in traditions or social capital Migration and Emigration	Migration	How relationships that transcend the district boundaries affect the district network structure Length of relationships Trust Social content
Economic and organisational factors	Adoption of enabling technologies Leading firms Technological gate-keeping Absorptive capacity	Sectoral trends Technological regimes Extra-cluster networking Spill-overs from FDI	How technological regimes affect the district network structure Main sources of critical information

This analysis will be coupled by a thorough assessment of the level of embeddedness displayed by the network structure, or in other words, the extent of the possible overlapping between business networks and socio-economic networks, if any, as in the case of industrial districts type II. We have seen how the review of the extensive literature of industrial districts reveals considerable ambiguity in the discussion of their network structure. Even though there is an explicit consensus that economic activities in industrial districts are embedded in a strong network of social relationships among individuals, firms and other organisations, the implications of such embeddedness for industrial districts remain ambiguous. On the one hand, embedded networks, arising from repeated, trust-based relationships that have been developed over time in a geographical proximity, are likely to bring sustainable competitive advantages both for constituent firms and for the district as a whole.

This supports the hypothesis that when global competition increases its pace, individual firms tend to cooperate more, rather than less with other firms that are known, trusted and reliable (e.g. other local firms). Under conditions of market uncertainty, factors typically considered as non-economic, such as status, reputation and geographical proximity become very important. In this sense, as global competition increase as well as market uncertainty, socio-economic networks become more intertwined with business networks and the district as a whole tends to become more embedded. Markusen describes this process through the metaphoric image of the emergence of "sticky places" in a "slippery space" (Markusen, 1996). The hypothesis finds also a broad consensus in the literature that further emphasises how embedded networks are more likely to emerge in

societies where institutional structures have difficulties in institutionalising trust across the full spectrum of society. Therefore people may be encouraged to engage in embedded networks to compensate for the inadequacies of their national institutional framework (Fukujama, 1995; McDonald & Burton, 2002). In his study on structural embeddedness, Uzzi finds that highly competitive markets are characterised by embedded networks of organisations rather than by "an atomistic mass of discrete firms" (Uzzi, 1997). A central argument is that there is a positive correlation between the level of embeddedness and the adaptive efficiency of the district as a whole (Mistri & Solari 2001; Dei Ottati, 2002). Ishikawa's fish diagram contributes to clarify the logics behind this contention[11].

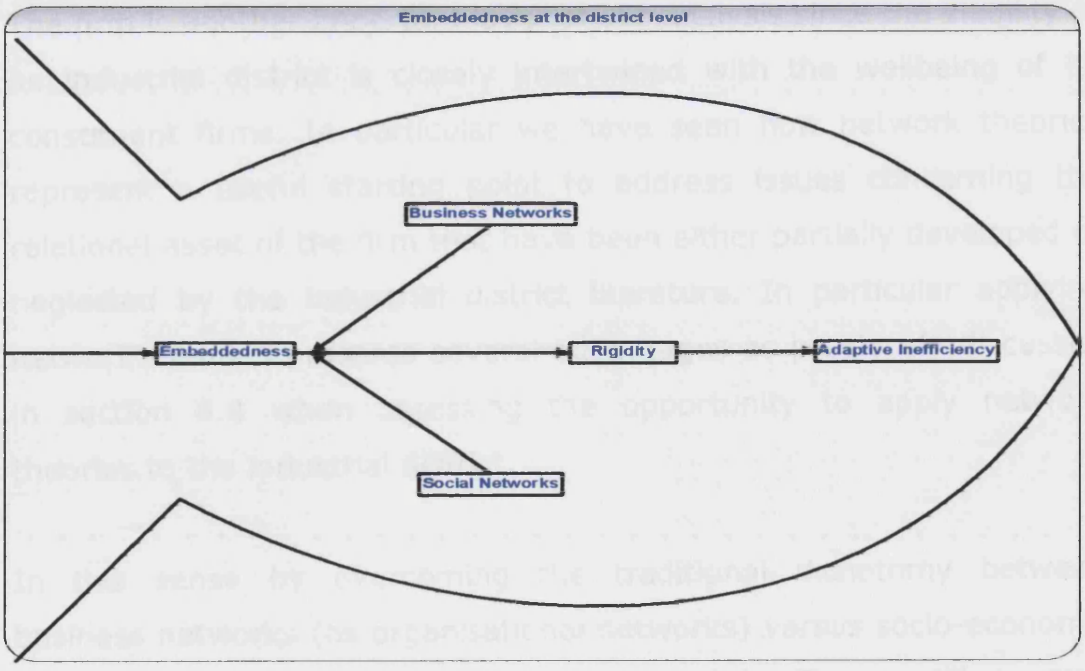
Figure 4.1: Embeddedness at the district level



[11] Ishikawa's Fish or "fishbone" diagram is a cause-and-effect diagram to systematically review factors that might affect or contribute to a given situation.

On the other hand, the positive effect of embedded networks reaches a threshold, after which point the positive effect reverses itself (Uzzi 1996, 1997). As industrial districts operate through embedded networks which promote competitiveness, at the same time embedded networks can also derail adaptive efficiency by several mechanisms. Network theories demonstrate for instance how networks can lead to innovation if their boundaries are relatively permeable and information can flow freely. If boundaries are closed, constituent firms may be prevented from importing new competences with potential greater adaptive value (Staber, 2001). Adaptive efficiency in this case is derailed by sealing off constituent firms from new information or opportunities that exist outside the network (Uzzi, 1996). A central argument is that there is also a positive correlation between the level of embeddedness and adaptive inefficiency of the district as a whole (Figure 4.2).

Figure 4.2: Embeddedness at the district level



On the basis of the literature review presented in Chapter III, this research intends to address this contradiction by comparing the network structures of two industrial districts located in two different countries: Italy and Britain. As the praised economic performance of Italian industrial districts has conventionally been seen as the outcome of the tight overlapping between its socio-economic and business networks (Becattini 1990, 2000; Piore & Sabel, 1983, 1984), similarly, the disappearance of industrial districts in Britain has been seen as a symptom of the loosening of such coupling (Curran and Blackburn, 1994; Bagnasco & Sabel, 1995; Zeitlin, 1995). By identifying possible patterns and correlations this research intends to formulate more encompassing assumptions on the network structure that is thought to provide adaptive efficiency to industrial districts in an era of global competition.

4.5 The small firm

The firm is another important layer of our analysis since the viability of an industrial district is closely intertwined with the wellbeing of its constituent firms. In particular we have seen how network theories represent a useful starting point to address issues concerning the relational asset of the firm that have been either partially developed or neglected by the industrial district literature. In particular applying network theories presents several advantages as previously discussed in section 4.4 when assessing the opportunity to apply network theories to the industrial district.

In this sense by overcoming the traditional dichotomy between business networks (as organisational networks) *versus* socio-economic networks (as personal networks) discussed in Chapter III, section

3.4.2, the relational asset of the firm is considered in relation to its twofold complexity. This research supports the hypothesis that the relational asset of the firm and therefore its positioning in the broader district network structure has important implications at both the district level and the firm level of analysis: in terms of adaptive efficiency of the district as a hyper-network, and in terms of firms' competitive performance and competitive strategy. This issue will be discussed more in-depth in the next section.

4.5.1 The relational asset of the firm

Although networks have been conceptualised in different ways, for the purpose of this research, the relational asset of the firm is therefore defined as the composition of both personal and organisational ties extending from, or converging on, the owner/manager (O'Donnell et. al., 2001)[12]. As the evidence proves, these different network relationships can be distinct and can be looked at in isolation, but at the same time they may be overlapping as they identify a complex structure of multiple network relationships.

This broader definition of the relational asset of the firm responds to two specific needs in terms of heterogeneity and dynamism of its relationships. First in terms of heterogeneity, as discussed in Chapter

[12] Although most writers acknowledge the diversity of small business owners, often the terms "entrepreneurs" and "owner-manager" are used as synonyms (Chell & Baines, 2000). As there is considerable debate about what constitutes entrepreneurship (Gartner 1990, 2001), an exhaustive discussion of this issue is beyond the aim of this work. Since it is now well established that only a sub-group of owner-managers are entrepreneurs, the broader definition of "owner-manager" will be adopted when referring to established firms. Conversely, "entrepreneur" will be employed to refer to emergent firms.

III, section 3.4.2, this broader definition of relational asset encompasses several advantages as it breaks the dichotomy between "organisational networks" and "personal networks", "identity-based networks" *versus* "calculative networks", "formal" *versus* "informal" networks, which traditionally divides the literature causing misapplication and inconsistent findings (O'Donnell et. al., 2001; Hite & Hesterly, 2001; Johannisson, 1986).

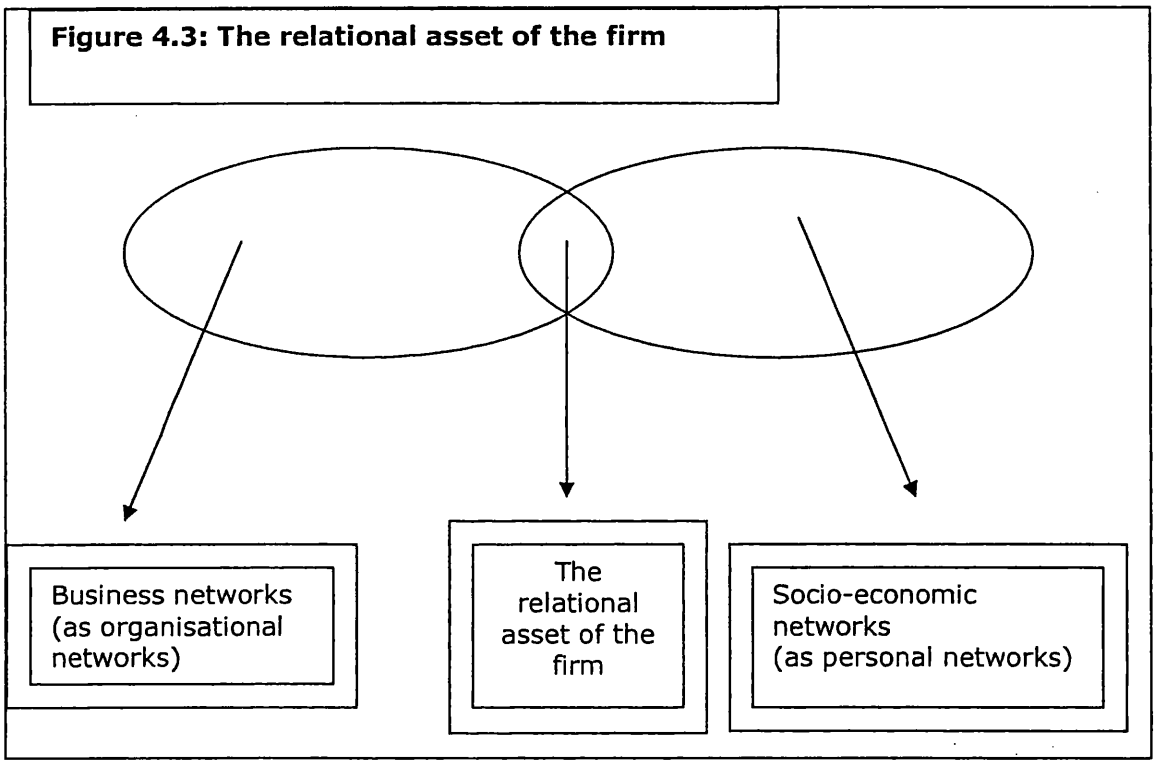
Second, this broader definition tries to capture the relational asset of the firm by also addressing its dynamic nature. As seen in Chapter III, section 3.4.2, according to some authors the idiosyncratic evolution from socio-economic networks (as personal networks) toward business networks (as organisational networks) occurs because "identity-based" and "calculative" networks possess different comparative advantages in meeting the resource challenges of availability, access and uncertainty. As several other contributions suggest, as firms emerge, their relational assets primarily consist of embedded ties and the socio-economic network of the entrepreneur (personal network) is virtually synonymous with the firm's business networks (organisational network), as network relationships at this stage mainly rely on interpersonal relationships (Hill et. al., 1999; Hite & Hesterly, 2001). Embedded ties are more prominent in the earlier stages of the firm because they help emerging firms to overcome challenges of resource access and circumscribed knowledge about available resources and opportunities. Their major role is providing support, motivation and self-confidence to the entrepreneur in relation to the risk associated with launching and developing an entrepreneurial career (Birley et. al., 1988).

However as the firm grows and develops, the relational asset of the firm may shift to become more disembedded by reducing the extent of the overlapping between business networks (organisational network) and socio-economic networks (personal network). This may occur because business networks as organisational networks at this stage provide greater resource availability and are more effective in mitigating more environmental uncertainty (Hite & Hesterly, 2001). As firms move into early growth, embedded ties are not liable to provide the range of resources needed to support growth. As a consequence, firms seek and develop a broader range of ties that have the potential to provide new resources and overcome the challenge of resource availability. Once the firm has been established, the relational asset of the firm assumes a more self-defined physiognomy but it may still depends on the socio-economic network of the owner/manager. At this stage the relational asset of the firm can provide benefits of resource sharing, allowing owners/managers to combine knowledge, skills and physical assets. It can also provide knowledge spillovers, serving as an information vehicle through which news of technical breakthroughs, new insights to problems, new ideas on products and service as well as highlighting failed approaches travel (Ahuja, 2000).

At all stages – from the firm's creation, its early growth to its consolidation – the relational asset of the firm allows us to identify market opportunities and assess ways to exploit them fully (Hill et. al., 1999), sometimes extending the owner/manager's range of existing contacts (Birley et. al., 1988). As the individual owner/manager plays a crucial role in developing and maintaining the relational asset of the firm, the resulting network is unique to that individual. It can therefore be seen as a distinctive intangible asset, whose value is intrinsically

entwined in the individual and in the personal way in which he/she engages and nurture the relationships (Hill et. al., 1999)[13]. The competitive advantage of the firm is therefore conceptualised as the firm's position within the multidimensional space that is generated by the simultaneous overlapping of the different network relationships: this space defines the relational asset of the firm.

Figure 4.3: The relational asset of the firm



Through a Venn diagram, Figure 4.3 provides its graphical representation. The underpinning assumption is that whilst these network relationships can both co-exist in combination (as in industrial

[13] An implication of this life cycle model is that owners/managers therefore need to be able to proactively manage the building, dismantling and rebuilding of his/her networks as well as he/she mirrors the continuous transformations of the firm as it develops and grows. The emphasis on this ever-shifting challenge has been described as a commitment to "continued entrepreneurship" over the life cycle of the firm (Hill et. al., 1999).

districts type II) or in isolation (as in industrial districts type I), it is their combination that makes the relational asset of the firm. It is the size of the overlapping – the extent to which the relational asset is embedded – that could provide different opportunities or threat to small firms. Uzzi for instance sustains that *'the type of network in which an organisation is embedded defines the opportunities potentially available; its position in that structure and the types of ties it maintains define access to those opportunities'* (Uzzi, 1996: 3).

Therefore, in order to address these issues both in term of heterogeneity and dynamism, the relational asset of the firm is more broadly conceptualised as the composition of both organisational and personal ties extending from, or converging on, the owner/manager. This broader definition includes: *business networks as organisational networks* that involve relationships with local competitors, buyers or consumers, suppliers and subcontractors; *socio-economic networks as personal networks* that involve the owner/manager's relationships with other organisations either industry-based, commercial associations, governmentally supported associations, special interest organisations, community-based or social organisations[14]. Since in section 4.4.1 the industrial district has been conceptualised as the hyper-network of the relational assets of its constituent firms, it should be noted how these relationships also represent backward, forward and horizontal linkages that constitute its network structure. Table 4.7 shows the different network relationships (rows) and how these have been operationalised

[14] The definition further encompasses the idea of the small business network has been seen by Curran & Blackburn (1994) as on a continuum: at one pole are all forms of compulsory participation in external relations that the firm needs to operate on the market; on the other end there are all forms of voluntary contacts.

(columns) according to both the level of analysis (the industrial district and the firm) and the units of analysis (the network structure and the relational asset of the firm).

Table: 4.7: Network relationships

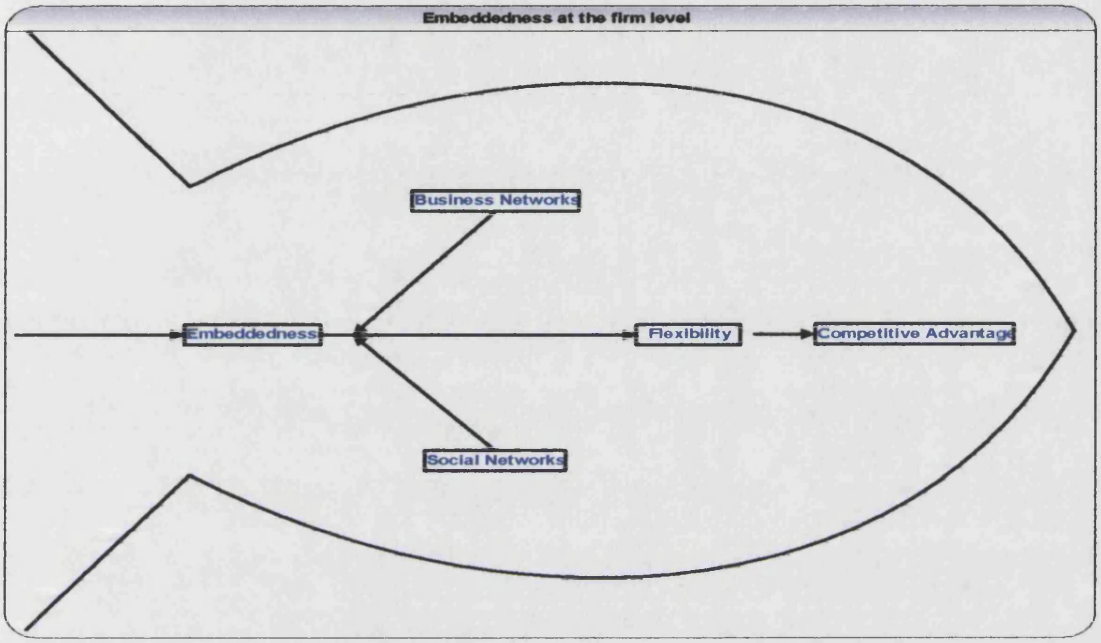
Network relationships	District level of analysis	Firm level of analysis
	The network structure of industrial district	**The relational asset of the firm**
Business networks		**Business networks as *organisational networks***
	Backward linkages	Suppliers and Subcontractors
	Forward linkages	Buyers or Customers
	Horizontal linkages	Competitors
Socio-economic networks (if any as in the case of industrial districts type II)		**Socio-economic networks as *personal networks***
		Industry-based
		Commercial
	Linkages with other organisations	Governmentally supported
		Special interest
		Community-based
		Social organisations

Given that industrial districts tend to display a relatively heterogeneous fabric, made up of different sizes and at different stages of their development where entrepreneurship plays often a significant role, the relational asset of the firm is considered a relevant unit of analysis. This more encompassing definition of the relational asset of the firm, overcoming the twofold dichotomy, should enable this study to provide a theoretically integrated statement of the relational asset of the firm and a systematic analysis of the conditions that may lead to competitive advantage for the single firm. As the industrial district has been defined as the hyper-network of the relational assets of its constituent firms, at the district level the relational asset of the firm should also provide a theoretical integrated statement of network structure and a systematic analysis of the conditions that may lead to adaptive efficiency for the district as a whole. In this sense, the relational asset of the firm appears a "new interpretative lens" to investigate on the viability of industrial districts in an era of globalisation.

More precisely, if we transpose everything that has been discussed so far from the district level to the firm level of analysis and we assume that as embeddedness both enables and constrains industrial districts, the same duality affects the single firm. As noted earlier, on the one hand, embedded networks, arising from repeated, socio-economic relationships that have been developed over time in a geographical proximity, are likely to bring competitive advantages not only for the district as a whole but also for its constituent firms. Because of their facilitative role, network relationships have been described as network resources (Gulati, 1999). A central argument is that there is a positive correlation between level of embeddedness and competitive advantage

(Dei Ottati, 2002; Bellandi, 2003). The Ishikawa's fish diagram contributes to clarify the logics behind this third contention.

Figure 4.4: Embeddedness at the firm level

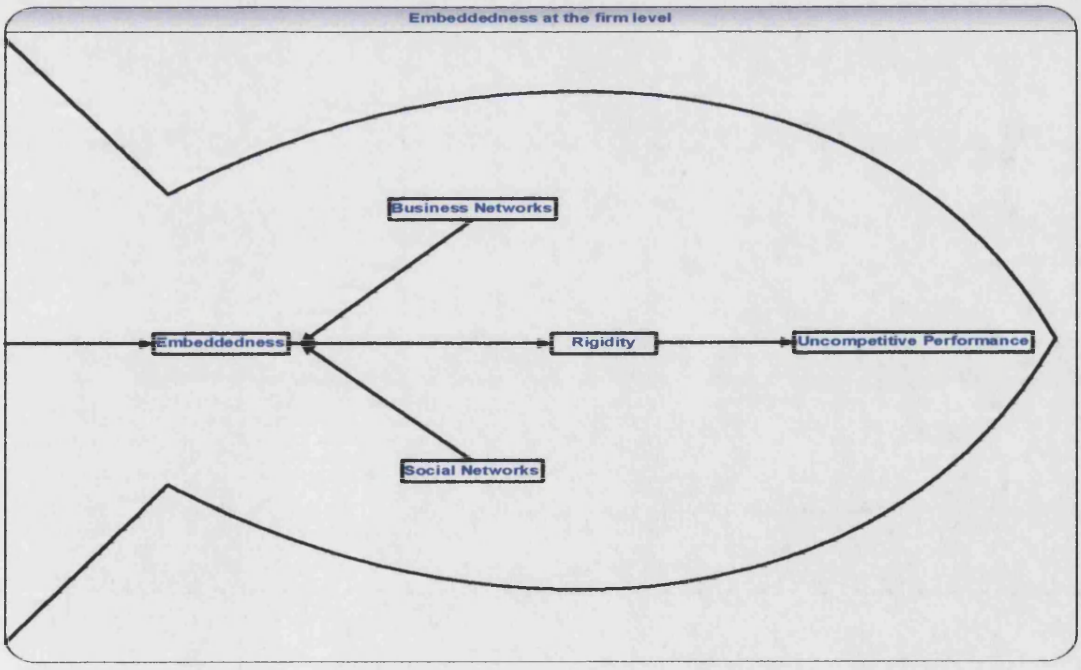


On the other hand, it has been argued that traditionally the argument of embeddedness in industrial districts has been usually accompanied by an implicit positive value judgement. Despite this attitude, some authors have highlighted the possible costs and liabilities of embeddedness (Soda & Usai, 1999; Bellandi, 2001). In organisation theory and strategy for example, recent research has typically emphasised how embeddedness represents a constraint rather than an opportunity for organisational actors. This duality is effectively addressed by Dacin and colleagues who affirm that *'embeddedness serves as an important means of stratification by opening windows of opportunity for some, while erecting barriers for entry, mobility and action for others'* (Dacin et. al., 1999: 333). Soda and Usai more

specifically demonstrate how over-embedded networks lead to imperfect competition, by creating opportunities and advantages for certain firms and not for others. In particular these findings show how a large and dense network of horizontal relationships may actually create negative externalities, inefficiency and merely ephemeral advantages in the long term (Soda & Usai, 1999).

Although such observations remain marginal in the current interest regarding industrial districts, they display the ambiguous nature of embeddedness. Yet, the central argument is that there is also a positive correlation between embeddedness and uncompetitive performance. Do over-embedded firms underperform less-embedded firms? The following Ishikawa's fish diagram contributes to clarify the logics behind this fourth contention.

Figure 4.5: Embeddedness at the firm level



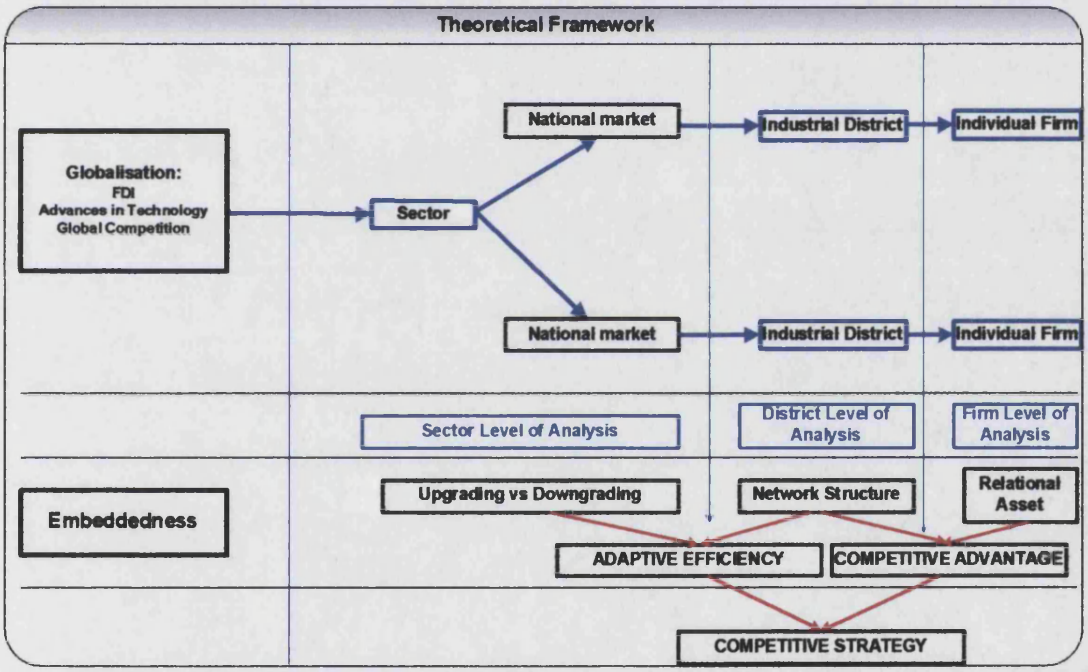
On the basis of the literature review presented in Chapter III, this research intends to address this contradiction by confronting the relational assets of small firms displaying a varying degree of both embeddedness and economic performance. By identifying possible patterns and correlations the research intends to formulate more encompassing assumptions on the relational asset that is thought to provide competitive advantage to small firms. By overcoming the traditional dichotomy between business networks (organisational networks) *versus* socio-economic networks (personal networks), the relational asset of the firm appears a "new interpretative lens" to analyse the resilience of industrial districts to cope with the dramatic changes occurring in their competitive environment.

On the basis of this alternative interpretative lens, we can assume that all the relationships which small firms engage – from canonical business relationships traditionally characterised by the total or partial absence of social contents, to non-economic relationships that are driven by social aims – might affect firms' competitive advantage. This perspective is strongly supported by resource dependency theory that proposes that a firm's continued existence is dependent on the ability to access and control environmental resources (Pfeffer & Salancik, 1978). The present work endorses the view that a firm's networking strategy is a competence-enhancing capability: by developing relationships or ties with its environment, the firm seeks to gain access to or exert control over scarce resources. This has long-term profitability implications for the firm and thus networking strategy can be seen as a competitive strategy that may lead to sustainable advantage (George et. al., 2001).

4.6 Toward a more encompassing theoretical framework

Drawing on the different concepts discussed in the previous sections and the different units of analysis introduced, the following diagram is useful to visualise the theoretical framework adopted, according to the different levels of analysis: the sector, the industrial district and the firm. Blue arrows define the structure of the theoretical framework, while red arrows represent the working hypotheses and the possible correlations amongst them.

Figure 4.6: Theoretical Framework



The key-assumption underlying the theoretical framework is that by jointly considering the different levels of analysis, namely the sector, the district and the firm, we should expect different outcomes. Within this context, the adaptive efficiency of the district is a function of both the upgrading/downgrading strategy undertaken by the district (in relation to its main sector of specialisation) as well as the characteristics of its network structure. Similarly, the competitive

advantage of the individual firm is a function of both its relational asset and the district's network structure. In this sense, both the adaptive efficiency of the district and the competitive advantage of its constituent firms determine the competitive strategy of the district as a whole.

Several limitations characterise the theoretical framework introduced. First, the theoretical framework adopted is quite static whereas assessing the viability of industrial districts would require a more dynamic approach. This issue has been addressed by implementing several research strategies. Drawing on the literature of industrial districts discussed in Chapter III, the theoretical framework seeks to incorporate several dynamic elements such as an assessment of both endogenous and exogenous sources of change. Within this context, particular emphasis has been placed on the dynamics of sectoral settings since the sector represents a crucial level of analysis. Similarly, to overcome this pitfall, the empirical analysis needs to take into account both the different implementation of national industrial strategies (as it will be discussed in Chapter VI) as well as the historical evolution of the two industrial districts under examination in order to assess their viability (as it will be discussed in Chapter V). As nodes in global networks (Amin and Thrift, 1994), it is true that industrial districts are dependent upon global trade and demand patterns, as well as exogenous technological and political changes. But at the same time, many industrial districts function as innovation powerhouses and as seedbeds for MNCs and hence play important roles for driving such global changes. We may only understand the dynamics of industrial districts by studying sectoral trends and technological regimes in close combination with the change of their network structure comprising a range of key actors (i.e. firms and

other organisations) and their relationships (i.e. business networks and socio-economic networks).

Second, despite the operationalisation of district network structure and its derived taxonomy between industrial districts type I and type II containing some dynamic elements, the taxonomy is overly simplistic. In reality, all industrial districts may contain characteristics of both types, although one type will tend to be dominant in each district. Therefore, both from an empirical and policy perspective, it would be necessary to determine which of the typologies best reflects an individual industrial district, so that the appropriate empirical testing and policy evaluation can be designed, without adopting *ex ante* a stylised description of any particular district. In this sense the adoption of the relational asset of the firm confers several advantages because it simultaneously allows us to assess both the existence and the nature of business networks as well as socio-economic networks, if any as in the case of industrial districts type II.

Overall, by endorsing the theoretical framework just described, this research offers an attempt to extend the industrial district literature in a number of ways. First, at the district level of analysis an integrated statement of network structure has been introduced in order to engage a more systematic analysis of the conditions under which network structures lead to adaptive efficiency for the district as a whole. Second, at the firm level of analysis an integrated statement of relational asset of the firm has been introduced in order to engage a more systematic analysis of the conditions under which it may lead to competitive performance for the single firms. Third, by conceptualising the district network structure as the hyper-network of the relational

assets of its constituent firms, the research wishes to provide a contribution to the wide debate on the synergy between social structure and economic action. In doing so, the research attempts to deliberate in favour of a more sustainable perspective of competitive strategy given that globalisation is increasingly eroding the traditional basis of competition while enhancing those advantages that are linked the property of renewable immaterial resource stocks.

4.7 Conclusions

Drawing on the literature of industrial districts that has been described in Chapter III, the research shares the view that each industrial district displays a distinct reality and that each is embarked on a developmental track which is highly specific and therefore not directly replicable in other locations. Since cultures, traditions and industrial experience of industrial districts can be very diverse and being the process of "districtualisation" as a constant modulation of a set process in time and in space rather than as "a punctiform event", conclusions with comparative validity must be approached with caution.

As the literature of industrial districts proves, within global competition patterns of success and decline find an uneven distribution across localities. The significance and the impact of globalisation visibly vary across countries. While the successful experiences of some localities in both developed and developing countries prove that globalisation can be defeated, the experiences of others prove exactly the opposite. By expressing itself as a patchwork of highly individualised experiences, paradoxically globalisation sheds a new light on the concept of the industrial district where the distributional logic that globalisation embodies needs to be carefully considered. In this context the

mechanism underlying the possible genesis of the nexus between local and global can be described in terms of two opposed and intertwined factors: on the one hand, extraordinary improvements of modern communication and transport technology facilitate the circulation of goods, FDI and know-how; on the other hand, there are still some transactions that remain extremely problematical over distance where the geographical proximity of all parties is crucial.

This latter trend has not only undermined the industrial district as basis of interaction and production, but in many respects has actually enforced it. Localised process of growth and development has been accentuated by globalisation. The literature on industrial districts in developing countries for instance shows how some formerly marginal industrial areas are becoming more and more integrated into vastly extended network of linkages and start to display the distinctive signs of developmental take-off. Probably because of the lowering of economic and political boundaries, many industrial districts have began to cast about for new ways to assert their economic interests, to build an highly localised competitive advantage, fulfil their needs and assert their very individual economical and political identity.

At an operational level, we have seen how network theories and theories of embeddedness represent a solid stimulus for embarking on an in-depth analysis of the conditions under which network structures lead to adaptive efficiency and to assess whether the relational asset of the firm can still provide competitive advantage in an era of globalisation. In order to do so, the research considers three levels of analysis, namely the sector, the industrial district and the small firm. Because of the particular nature of industrial districts, these three levels of analysis are closely intertwined.

First, the sector is an influential level of analysis as different sectoral settings offer different ranges of opportunities to both industrial districts and their constituent firms. Second, the district level of analysis is considered since industrial districts tend to respond in different ways to the dramatic changes in their competitive environment. Third, given the wider opportunities provided by industrial districts to small firms, it is important to understand small firms not only in respect of the strategic choices that they might implement collectively, but also according their individual patterns of action.

In terms of operationalisation of the key constructs, conceptualising the district network structure as the hyper-network of the relational assets of its constituent firms represents a useful starting point to address all the issues that have been only partially developed by the literature. In particular, two dimensions that have been traditionally neglected by both descriptive and empirical studies on industrial districts are addressed: the impact of change due to both endogenous and exogenous causes and the heterogeneity of the actors. In this sense, the district network structure is considered as a heterogeneous network structure. This in turn will provide a theoretically integrated statement of both network structure and relational asset of the firm on the basis of which it would be possible to carry out a more systematic analysis of the conditions under which they determine specific outcomes.

To this end, by overcoming the traditional dichotomy between business networks (as organisational networks) *versus* socio-economic

networks (as personal networks), the relational asset of the firm is considered in relation to its complexity. More precisely, for the purpose of this research, the relational asset of the firm is defined as the composition of both personal and organisational ties extending from, or converging on, the owner/manager. In addition, this broader definition of the relational asset of the firm responds to two specific needs in terms of heterogeneity and dynamism of its relationships. From here it follows that the competitive advantage of the firm is thus conceptualised as the firm's position within the multidimensional space that is generated by the simultaneous overlapping of the different relational networks – business networks as organisational networks and socio-economic networks as personal networks – and this space defines the relational asset of the firm. Its level of embeddedness, which is the extent of the overlapping between these two networks, has different implications: whereas at the firm level, the level of embeddedness has implications for the single firm and its competitive advantage; at the district level it has implications for the district network structure - for its adaptive efficiency as well as for the opportunities that may provide in terms of competitive strategy.

A more detailed explanation of the methodology adopted to address these issues will be provided in Chapter V.

CHAPTER V METHODOLOGY

5.1 Introduction

Methodology concerns the issue of how to structure the research process, and more precisely, the techniques that are adopted by the researcher (Macri & Tagliaventi, 2000). Methodology can be roughly defined as the third step of a subsequent selection process in terms of ontology, epistemology and methodology. These three choices draw the boundaries of the research paradigm which informs the investigation.

This chapter begins with setting the background for industrial district research. To this end, section 5.2 defines the methodological tradition dominating the research area and how the research relates to previous work. This will allow us to justify the underlying choices that inform the present work and to provide the latter with its own methodological space. As far as research design is concerned, a multiple-case study design, based both on a cross-national comparison and a mono-sectoral investigation, has been chosen in order to carry out a detailed and comprehensive investigation of two industrial districts. These choices will be exhaustively discussed in section 5.3; section 5.4 and section 5.5 will concern data collection methods and a brief outline of data analysis.

5.2 Research method

Industrial district research has been progressively enriched by various contributions coming from different strands of social science such as economics, sociology, politics and geography. Similarly, small firm

research is not a discipline in a conventional academic sense. It would be more accurate to describe it as a genuinely cross-disciplinary area (Curran & Blackburn, 2001). The paradigm shift underpinning small firm research has been particularly visible under three different perspectives. In terms of ontological perspective, small firm research has progressively widened its horizons, taking into account "new variables" in the attempt to understand the social context that has favoured the persistency of small firms over time. The epistemological insight has also changed significantly – today small firm research is no longer necessarily an exclusive prerogative of the impartial observations of economists, but has progressively become an "open" field for other social scientists. Conversely, pure methodological quantitative approaches have been acknowledged as increasingly inadequate to capture the complexity that small firm research encompasses and have therefore been coupled with qualitative ones (Macri & Tagliaventi, 2000).

Research questions have also been diversely addressed over time. Particularly during the 1980s, most of the literature attempting to explain the unexpected presence of small firms focused on their territorial specificity. Particular emphasis has been placed on geographical, political and economic factors that characterise the decentralisation of production. At the same time, methodological approaches have been aimed at empirically assessing the benefits and advantages of flexible economies of scale *versus* the costs and disadvantages associated with the rigid assets of centralised production. Within this context, quantitative approaches often grounded in cost-benefit analysis have been fairly widespread (Brusco, 1975; Frey, 1974; Garofoli, 1982). During the 1990s, literature on

small firms accorded a more privileged role to its social environment. Within the mainstream view, however, there has been merely a tacit acknowledgement that economic activities are only part of the wider social relations in which people engage. Within this perspective, sociological factors such as culture, political orientation and family structure have become key issues in explaining the proliferation of small firms in certain areas (Anastasia & Coro', 1996; Bagnasco, 1996). As soon as sociological issues spread and became prominent factors in the literature, methodological approaches started to move towards more qualitative analysis mainly aimed at discovering factors enhancing entrepreneurship.

A concise summary of the methodological tradition dominating research on industrial districts will be given in the next section. Drawing on the methodological domain of previous work, section 5.2.2 will describe how the current research relates to previous work.

5.2.1 Methodological tradition dominating the research area

Traditionally, even though Marshall identified the most salient traits that characterise industrial districts (geographical proximity, sectoral specialisation and the presence of strong networks), his analysis mainly relies on a descriptive approach. As the traditional formulation of the industrial district thesis manly relies on neo-classical economics, it has made significantly more of a theoretical impact than methodological progress. Despite Marshall's work being mostly based on secondary data of important industrial districts of the past, such as Sheffield, Solingen and Lancashire, the methodological dimension remains significantly underplayed. Overall, despite neo-classical economics with its mono-disciplinary approach appearing to be able to

address causal relations, it remains too abstract for those who are interested in explaining the real world.

Successive studies of industrial districts, such as those put forward by Becattini and complemented by his scholars (Dei Ottati, 1994; Calza-Bini, 1996), focus on an extensive use of case studies taking into account a wide variety of approaches and different phenomena. As discussed in Chapter III, the resulting impression is that general characteristics of various models are automatically applied according to personal convenience and without any empirical assessment of areas that merely display high concentrations of small firms. Paniccia, for instance notes how Harrison's (1994) choice of industrial districts confirmed his idea of devolution whereas other researchers have focused on the most successful industrial districts (Paniccia, 1998). Zeitlin, in a similar vein, states that as *'there is no universally accepted definition or model of what constitutes an industrial district, while the multiplicity of cases subsumed under this rubric displays wide variations in internal structure, social complexion and economic performance'* (Zeitlin, 1995: 99).

The extensive use of case studies explains to some extent why the industrial district thesis, despite appearing to be multi-disciplinary finds it difficult to blend together different theoretical strands. In particular as it has been previously pointed out, the industrial district thesis has always had an uneasy dialogue with both location theory and growth theory. The former for instance places emphasis on the socio-institutional factors whereas both stress technological and economical factors. As the result of this different emphasis, divergent methodological approaches are adopted: while both location theory

and growth theory mostly rely on econometric approaches, the industrial district thesis has extensively relied on case studies where most of the relevant variables are "soft" and therefore difficult to measure. Schmitz (1997) for instance points out how recent multi-disciplinary studies take into account too many factors and seem incapable to draw any distinction between the critical causal relations under investigation and the morphological connotation of the industrial district *per se*.

Although network theories could effectively complement and counterbalance the descriptive level of analysis provided by the industrial district thesis by providing a more rigorous definition of both business networks and socio-economic networks, they displayed a major pitfall. More precisely, network theories have been limited by a dualistic approach that induces the researcher to look at these networks in isolation hence preventing any substantial assessment of their interaction. To this purpose, the theory of embeddedness filled this gap by introducing an analytical tool, *the relational asset of the firm,* which simultaneously is able to capture *all* the relationships in which small firms engage – from canonical business relationships traditionally characterised by the total or partial absence of social contents, to socio-economic relationships that are driven by social aims – that might affect organisational performances. In light of these considerations and by merging these two streams of literature – industrial district thesis and network theories - a more comprehensive theoretical framework was introduced in Chapter IV.

5.2.2 How the research relates to previous work

Drawing on the methodological tradition dominating the research area, this research has adopted a multiple-case study methodology, based both on a cross-national comparison and a mono-sectoral investigation. By adopting a network approach (which has been exhaustively discussed in Chapter IV), the research has been conducted on the basis of a questionnaire to guide data collection and analysis. The work also relies on different sources of evidence such as interviews and secondary data. Triangulation was also adopted to match quantitative and qualitative data.

5.3 Research design

As Easterby-Smith and colleagues (Easterby-Smith et. al., 1991) suggest, there are two possible criteria for the choice of research design: the personal preference of the researchers themselves and the aims or context of the research to be carried out. More precisely, the appropriateness of a research approach derives from the nature of the phenomena to be explored (Macri' & Tagliaventi, 2000).

Given the methodological traditions distinguishing the research area, a multiple-case study design based both on a cross-national comparison and a mono-sectoral investigation has been chosen in order to carry out a detailed comparison of two industrial districts. The following sections discuss the logics behind each of these choices. The implicit assumption is that the objective of the research could not be achieved by adopting a different methodology.

5.3.1 A multiple-case study design

As far as research design is concerned, a multiple-case study design based both on a cross-national comparison and a mono-sectoral investigation has been chosen in order to carry out a detailed and comprehensive investigation of two industrial districts and their respective network structure.

Owing to a lack of empirical research in this subject area, and to the fact that the researcher has no power to manipulate the behaviour of the relevant actors (small firms and other organisations) within the on-going event (relationships between them), the case study approach has been deemed the best analytical tool. Given that the research is a study that neither repeats nor tests earlier work, the case study is the logical choice to explore the chosen topic.

Driven by the genuine intention of conducting some comparative research, the research has chosen a multiple-case design. As explained by Yin: *'Case studies are the preferred strategy when "how" or "why" questions are being posed, when the investigation has little control over events, and when the focus is on contemporary phenomena within some real-life context'* (1999:6). Given the complex nature of industrial districts, the case study approach has therefore been deemed as the best analytical tool. As described by Yin, multiple-case design contains more than one single case of analysis in the same investigation and thereby permits comparisons across cases. The evidence from multiple cases is often considered more compelling and the overall study is therefore regarded as being more robust. When a multiple-case study design was chosen, each case was carefully selected so that it either predicts similar results or produces

contrasting results for predictable reasons (Yin, 1999: 46). To this end, two case studies were selected. Only two cases were selected as opposed to more because in the genuine attempt to conduct a cross-national comparison, the choice of two – Montebelluna in Italy and Northampton in Britain - was deemed as a suitable contrast of settings to assess the viability of industrial districts[15]. Comparing the different experiences of two industrial districts located in two industrialised countries, both engaged in the same dematuring sector such as footwear was an interesting field of investigation *per se* and it was estimated that the research was likely to need considerable fieldwork. In terms of feasibility, the choice was also driven by the practical constraints for the researcher to conduct the fieldwork in two relatively accessible countries such as Italy and Britain. Since, the research was also conducted to produce a doctoral thesis, it had to rely on limited funding and needed to be conducted within a reasonable time-frame.

Once having selected two relevant cases, a case study protocol has been developed. As recommended by Yin, the protocol was used as a major tactic in increasing the reliability of multiple-case design (Yin, 1999). More precisely, the case study protocol contained instruments, procedures and general rules that will be followed in each case study. Each case study protocol contained:

a) An overview of the case study project. The overview covers the background information about the specific case under investigation as well as the substantive issues being investigated.

[15] A more through discussion of the preliminary criteria that made them relevant at the initial stage of the investigation will be provided in section 5.3.2.

b) Field procedures. The protocol emphasises the major tasks in collecting data, such as a clear schedule of the data collection activities (i.e. questionnaires and interview schedules, secondary data to be collected).

c) Case study questions. The specific questions that the case study should address, the potential sources of information for answering each question and "table shells" for specific arrays of data.

For each case study, an individual case report was written. In each individual case study, convergent evidence was sought regarding the relationships and the conclusions for the case. Each case's conclusions were then considered as the information needing replication by the other individual case. Both the individual cases and the multiple-case results were the focus of a summary report.

5.3.2 A cross-national comparison

In order to assess how small firms achieve their competitive advantage and more specifically the role that both network structure and the relational asset of the firm plays in such a context, the comparison between two industrial districts – one in Italy (Montebelluna) and one in Britain (Northampton) - is extremely significant under various profiles.

The divergent experience of Italy and Britain associated with the use of the term industrial district is interesting *per se*. As discussed in Chapter III, this term industrial district was coined by Marshall to

describe some forms of economic activity in Britain in the nineteenth century, although the same concept has been most recently developed to describe Italian clusters that display remarkable signs of growth and internationalisation. In contrast, when discussing the possible existence of Marshallian industrial districts in Britain today, a less prosperous fate is currently described. In particular the *state of the arts* of industrial districts in Britain is often strongly undermined by a remarkable skepticism. This skepticism has led many authors to question the existence of Marshallian industrial districts in Britain. In particular, as discussed in Chapter IV section 4.4.1, whereas the praised economic performance of Italian industrial districts has been conventionally seen as the outcome of their embeddedness (Becattini 1990, 2000; Piore & Sabel 1983, 1984), the disappearance of industrial districts in Britain has been seen as a symptom of their disembedded nature (Curran and Blackburn, 1994; Bagnasco & Sabel, 1995; Zeitlin, 1995).

Curran and Blackburn's (1994) findings of a study of British small firms lead them to argue for instance that strong networks are weakening and that there appears to be no evidence of the existence of industrial districts. As such, the concept may only be of historical interest in Britain (Zeitlin, 1995). In addition, a more recent study carried by Curran and colleagues (Curran et. al., 2000) indicates how small firm owners in Britain tend to be detached from localities and from local economic and social initiatives. Other attempts to discover examples of industrial districts in Britain have met with less success. More specifically, despite the undeniable resurgence of small firms and self-employment, close observers of the British scene have been unable to identify localised networks of small firms specialising in distinct phases

of a common industrial sector, which also display evidence of economic dynamism and endogenous growth (Zeitlin, 1995). Magatti (1993) for example, notes that the behaviour of the British government in promoting the concentration of ownership of the textiles industry in the 1960s destroyed any remaining vestige of industrial districts in the Lancashire cotton industry. Similarly, studies of contenders for the appellation of industrial district in Britain, such as Hertfordshire and Cambridge, have been critical. Henry (1992) notes that some firms exhibit features which one would expect to find in an industrial district, but his evidence is not so conclusive (Baker, 1995). In the case of Cambridge, Garnsey and Cannon-Brookes (1993) note that links outside the Cambridge area are more important to high-tech firms than those within the proximate geographical area. In this sense, the literature on British industrial districts tends to suggest how over time they might have lost some of their distinctive features – strong networks Curran & Blackburn, 1994; Curran et. al., 2000), sectoral specialisation (Zeitlin, 1995) or geographical concentration (Garnsey & Cannon-Brookes, 1993). The overall result is that British industrial districts no longer enjoy what we refer to as adaptive efficiency.

On the contrary, Italian industrial districts have been portrayed by the literature for their adaptive efficiency. Despite the severe recession experienced by the manufacturing sector at worldwide level, both academics and the media are still praising the economic performances of the numerous Italian districts that still contribute significantly to the prosperity of the hesitating Italian economy. When discussing the reasons for the resilience of what has been termed the "Italian Laboratory", Bellandi for example notes how *'the strong embeddedness of the principal industrial activities pulls the*

reproduction process of such "local factors" and activates their reserves to a high degree' (Bellandi, 2003: 6). A similar contribution comes from Dei Ottati, who emphasises how in Italian industrial districts *'the greater social cohesion at the basis of the extra adaptability which fuels the continuous regeneration of the district's competitive advantage is not an entirely spontaneous outcome of shared rules and values inherited from the past'* (Dei Ottati, 2002: 451). According to this strand of the literature, it is not only business networks but also socio-economic networks that are responsible for the adaptive efficiency of Italian industrial districts, however it is also typically the result of conscious concerted action that is promoted by appropriate policies.

As well as displaying a different degree of adaptive efficiency, Italian and British districts also seem to pursue different competitive strategies. A comparative study of textile industrial districts located both in Italy and Britain has been conducted by Oughton & Whittam (1997). The findings of their research demonstrate how the response of the British textile industry to global competition was dictated by British producers embarking on individual strategies centred on cost cutting. In contrast, Italian firms responded by collectively applying new technology to incorporate design as a crucial part of their products, thus placing their goods in the high quality, high value-added link of the global chain that was less vulnerable to global competition.

Because of these striking contrasts, both Italy and Britain offer a unique setting in which propositions on adaptive efficiency can be

fruitfully tested and where conclusions on competitive strategy can be effectively drawn.

The choice of Montebelluna and Northampton was driven by several criteria. First, drawing on the workable definition of industrial districts, both localities mainly rely on the footwear sector and display a geographical concentration of small firms. In this sense, both localities display sectoral specialisation and geographical concentration. Second, in both localities there are business networks as they both benefit from an active presence of numerous institutions, either business-oriented or with social aims[16]. As well as displaying a very well defined historical tradition in the footwear sector, both localities appear today as two well established industrial districts and they both feature a characteristic "urban dimension" (Becattini, 2001). Third, a long and evolving history was a relevant prerogative for cross-case comparability. There was the desire to carry out a genuine cross-national comparison amongst two localities where small firms have historically always played a significant role. Furthermore both these districts display very different performances: the economic efficiency of Montebelluna stands in contrast to the overall problematic performance of Northampton. This issue raises interesting interrogatives and adds value to the opportunity of conducting a cross-national comparison between Italy and Britain.

[16] A more thorough discussion of the empirical data supporting this contention is provided in Chapter VI sections 6.5.1 and 6.5.3, when analysing the districts' industrial structure within the broader sectoral settings.

5.3.3 Mono-sectoral investigation

The choice of the footwear sector responds to its own rationale and can be justified on several grounds. First, in the footwear sector, firms tend to be more independent because of their craft heritage. Taking into consideration this sector permits the formulation of more encompassing assumptions on the significance of social structure for economic activities. The footwear sector appears to be a model competitive market subject to an intense international competition made of numerous small firms, low barriers to entry, low start-up costs and low search costs. In this kind of industrial setting, economic theory makes strong predictions that social structure should minimally affect economic performance and this is thus the ideal setting in which to test assumptions about its relevance (Uzzi, 1997).

Second, the footwear sector was chosen as exemplar of a "sunset" industry and a manufacturing sector with a particular history of European pre-eminence. The "industrial dematurity" of the sector calls for innovative approaches to its management (Bull et. al., 1993). It is also a sector in which small firms have always played a crucial role and which has recently experienced a marked decline in terms of output and employment, at the European level.

Third the sector was chosen because it manifests a variety of forms of production and possible trajectories to survival and growth in the face of global competition. This particular feature has already attracted the interest of numerous researchers and a fairly good number of empirical studies have been recently developed (Rabellotti, 1997; Belussi, 2005; Giuliani, 2005; and many others).

5.4 Data collection methods

The present research followed a deductive approach in which the literature informs the choice of data collection methods (Easterby-Smith et. al., 1991; Saunders et. al., 2000). As a result, first there was the need to identify how the relevant sample is to be defined for the footwear sector and for each industrial district.

In order to identify a relevant sample of firms for each district, the local directory of the British Footwear Association (in Northampton) and the local directory of the Chamber of Commerce of Treviso (in Montebelluna) were consulted with the aid of expert opinion. Each directory constituted the sampling frame for its respective industrial district (Saunders et al., 2000). Both the British Footwear Association (BFA) and Treviso's Chamber of Commerce represent in fact "key actors" for each locality - they are the agents who know the district in terms of basic practice and relationship patterns (Stough, 1997). With the help of expert opinion it was relatively easy to extract a sector/locality consensus on what should be regarded as a pool of eighteen leading and/or influential firms for each district. This choice was underpinned by the need to gather data that could be cautiously generalised in order to make assessments and comparisons between the two districts. In both cases, with the aid of expert opinion, eighteen firms were considered an adequate sample size in order to formulate two representative samples of firms that might vary in terms of both embeddedness and performance in order to ensure proper industry representation.

Secondly, the selected eighteen firms for each district were contacted by telephone to establish their availability of being involved with the

research project. The nature of the study, together with a clear account of purpose and type of access required, were presented and the terms of participation were agreed. An introductory letter was sent to those firms that granted access to their organisations (see Appendix). In both cases, out of the eighteen firms, only fourteen in each district agreed to take part in the study. The reasons of those firms that did not consent their participation are also listed in the Appendix.

The fieldwork in Italy was carried out in Montebelluna between September 2002 and September 2003 and involved approximately 25 visits (see Appendix). The objective of the inquiry was to study how firms interact with firms and other organisations in the district. To this end, the explorative survey investigates the level of embeddedness of backward, forward and horizontal linkages and linkages with other organisations as well as their implications for the adaptive efficiency of the industrial district as a whole. The explorative survey is based on a questionnaire distributed to 14 shoe producers. The questionnaire was administered by the interviewer so that the respondents were prompted to discuss emergent issues as well as clarifying some of their responses. This allowed for not only quantitative data to be collected but also very substantial amounts of qualitative data. The questions were mainly objective but certain perceptive measurements of the Likert scale were used to evaluate the relevance of certain contacts to the business activity. The questionnaires were also complemented by interviews with the firms as well as with key informants. Similarly, the fieldwork in the UK was carried out in Northampton between February 2002 and December 2003 and involved approximately 20 visits.

Overall, the enquiry was organised in two steps: a first phase in which the investigation was based on a questionnaire distributed to manufacturers and on a number of open interviews to key-informers; a second step in which more in-depth interviews and collection of secondary data were undertaken. Both stages are described in some detail in the following sections.

5.4.1 Framing the questionnaire

The objective of this first phase was to obtain sufficient information on the most interesting traits of both localities in order to identify what was significant enough to be scrutinised more closely through follow-up research. Initially a good deal of knowledge about both localities and the sector was gleaned through a review of the relevant literature available. More precisely, several empirical studies on industrial districts (Rabellotti 1995, 1997, 2001, 2003; Schmitz 1992, 1995, 1997, 2000) were used in order to develop a set of questions that were deemed as appropriate for the questionnaire. In line with the bulk of this literature, the questions mainly addressed the nature of backward, forward and horizontal linkages, based on both market and non-market exchanges of goods, services, information and people. Some additional questions relating to the nature of the linkages with other organisations such as industry-based associations, commercial associations, governmental associations, special interest associations, community-based associations as well as social organisations were also developed (Curran & Blackburn 1994, 2001).

At this stage, in order to narrow down the scope of some of the questions, twenty open interviews (ten for each locality) to

entrepreneurial associations, sectoral experts, suppliers, buyers and representatives of local institutions were crucial to gain a preliminary insight of the social and business networks in both localities. On the basis of this preliminary knowledge, a pilot questionnaire was developed and distributed amongst a sub-sample of five firms for each locality. As the result of the feedback provided by the responses, the questionnaire was then discussed with some key informants and was successfully refined through successive stages. Once a suitable and final version of the questionnaire was reached, the questionnaire was administered in person by the researcher to the selected fourteen firms in each locality (see Appendix). On most occasions the researcher also visited the workshop/factory. These visits were extremely useful to gain additional insights on the production methods deployed by the firm, the technological level as well as to achieve a fair level of familiarity with the respondents.

The main owner/manager constituted the main respondent. In small firms, owners/managers are involved in all key aspects of the firm and through them it will be possible to access first-hand knowledge of the relational asset of the firm (Curran & Blackburn, 2001). Administering structured questionnaires allowed for quantitative data to be collected (the firm's relevant contacts, length of the relationships, geographical proximity) as well as qualitative data collections (contents and nature of these relationships). A copy of the questionnaire is enclosed in Appendix I. Preliminary findings were developed and, at the same time, certain gaps were identified for further investigation. This also allowed the theoretical framework underpinning research questions and research objectives to be further refined.

5.4.2 Interviews and secondary data

This stage of the investigation was intended, via a mixture of semi-structured interviews and through the collection of relevant secondary data, to examine thoroughly the key issues emerging from the questionnaire and gain a deeper understanding of the relational asset of each firm. To this end, both email communications and telephonic conversations were utilised to make contact with the participants of the study in order to foster further understanding of those points that were not investigated sufficiently through the questionnaire (a copy of the protocol for the interview has been enclosed in the Appendix).

In administering the semi-structured interviews, special attention was paid both to conceptual and linguistic equivalence, referred to by Glaser and Strauss (1967) as a crucial feature in order to achieve relatively valid results. As the interviewees were composed of both Italian and British owners/managers, the English version of the semi-structured interview was carefully translated into Italian, and back translation was carried out to seek content consistency between them (Brislin, 1970). Participation in the interviews was totally voluntary and the anonymity of the respondents and their confidentiality were assured.

In order to overcome some of the problems related to the accuracy of the data collected with the questionnaire, some of the data collected through the questionnaire was complemented and cross-referenced with secondary data. Information gathered through semi-structured interviews was also matched with relevant secondary data such as formal studies or evaluations of the same locality under report, newspapers articles and reports, and other articles appearing in the

mass media. For case studies, in fact, the most important use of documents is to corroborate and augment evidence from other sources (Yin, 1999).

5.5 Data analysis

The analysis of case study evidence is one of the most difficult aspects of doing case studies (Yin, 1999). The data was analysed in order to establish the conditions that may lead to adaptive efficiency of the district as a whole and to competitive advantage for its constituent firms. Data analysis was carried out by means of quantitative analysis, qualitative analysis and triangulation. The following sections describe a brief outline the process.

5.5.1 Quantitative analysis

The results of the questionnaire were analysed with different statistical instruments:

a) frequency tables to identify the existence of relationships amongst variables;
b) factor analysis was attempted in order to summarise the main features of the network structures analysed at the district level;
c) cluster analysis was attempted in order to identify sub-groups of firms characterised by homogeneous characteristics;
d) correspondence analysis was attempted to identify the profiles of sample firms according to their performance.

As both samples were limited to only 18 firms, this did not allow for a great generalisability of the results. In this sense statistical analysis was employed in an explorative fashion in order to address more specifically the qualitative analysis.

5.5.2 Qualitative analysis

The findings from the quantitative analysis of the questionnaires were utilised in order to carry out in-depth network case studies about the relational asset of each participant firm. The network case study was carried out through 28 semi-structured interviews (14 for each district) and it mainly focused on both the organisational and personal relationships of the owner/manager, within and outside the district. At the district level of analysis, the same relationships were considered in terms of backward and forward linkages, horizontal linkages and linkages with other organisations as previously discussed in Chapter IV, sections 4.4 and 4.5.

Interviews and field data were recorded by structuring the data collected to address the research questions identified and to test empirical propositions on embeddedness. The transcription of the interviews was carried out on a selective basis as suggested by Strauss and Corbin (1990). Only those portions of the interviews and the field notes that pertained to the research questions and objectives were transcribed. The first activity involved classifying the data collected into meaningful and related categories. To this end, relationships were considered in relation to their nature, geographical proximity, their length and their content. The choice follows the theoretical prepositions previously discussed within the theoretical framework in Chapter IV. The strategy is regarded by Yin as a preferred analytic strategy when *'the original objectives and design of the case study presumably were based on such repositions, which in turn reflected a set of research questions, review of the literature, and new insights'* (Yin, 1999: 103).

Categorising data relating to the features of backward and forward linkages, horizontal linkages and linkages with other organisations, such as their nature, geographical proximity, their length and their content was crucial in order to generate other categories and reorganise the data according to them. There were practical reasons for seeking to divide or join the initial categories. Some categories, for example, attracted large numbers of units of data and proved be too broad for further analysis without being subdivided (Saunders et. al., 2000). The main aim of this process was to find emerging patterns in order to test the hypotheses supported by the literature on industrial districts and therefore to assess the extent by which some conditions render both network structure and the relational asset of the firm capable of being conducive to specific outcomes. The underlying pattern-matching logic of this process, the comparison between an empirically-based pattern with a predicted one, is one of the most desirable strategies for case study analysis. If the patterns coincide, the results can help a case study strengthen its internal validity (Yin, 1999).

5.5.3 Triangulation – matching quantitative and qualitative analysis

Overall, the importance of the distinction between the positivist approach, on the one hand, and constructivist models on the other, cannot be overstated and the implications for industrial district research need to be considered carefully. A great deal of theorizing and research employing both positivist and non-positivist models has been devoted to the small firm. But even though the two approaches coexist, the distinction between them remains profound. However, as the literature review seems to suggest there is no need to adopt a

view *a priori* that only a positivist or a non-positivist approach is valid in industrial district research. Each approach is rather appropriate for particular kinds of topics (Curran & Blackburn, 2001). Furthermore, often research on small firm benefits strongly from a mix of quantitative and qualitative approaches a form of "methodological triangulation".

Triangulation is broadly defined by Denzin (1978: 291) as *'the combination of methodologies in the study of the same phenomenon'.* The triangulation metaphor comes from navigation and military strategy that use multiple reference points to locate the exact position of an object. Given basic principles of geometry, multiple viewpoints allow for greater accuracy. Similarly, researchers can improve the accuracy of their judgement by collecting different kinds of data bearing on the same phenomenon (Jick, 1979). The use of a mix of methods helps by ensuring that the weaknesses and blind spots of one approach are compensated by the strengths of one or more other approaches. Confidence in the conclusions will be higher if different approaches have produced similar results (Yin, 1999). It is also a vehicle of cross-validation when two or more distinct methods are found to be congruent and yield comparable data (Jick, 1979). To this end, qualitative analysis particularly has been intended to elicit data and suggest conclusions to which quantitative analysis would be blind. In particular, elements of the context are illuminated. In this sense triangulation is not used only to examine the same phenomenon from multiple perspectives, but also to enrich the researcher's understanding by allowing for new or deeper dimensions to emerge.

5.6 Summary

This study aims to provide a theoretically integrated statement of both network structure and the relational asset of the firm and to develop a theoretical framework that can assess the conditions that render them capable of being conducive to adaptive efficiency and competitive advantage. The research proposes the use of two different districts located in different countries whilst engaging in the same industry. Drawing on the methodological tradition dominating the research area, the case study approach was deemed as the best analytical tool. More precisely, in terms of research design a multiple-case study design, based on both a cross-national comparison and a mono-sectoral investigation, was chosen in order to carry out a detailed and comprehensive investigation of two industrial districts – Montebelluna (Italy) and Northampton (Britain). A case study protocol was used as a major tactic in increasing the reliability of multiple-case design. The enquiry was organised in two steps: a first phase in which the investigation was based on a questionnaire distributed to shoe manufacturers and on a number of open interviews to key informers; a second step in which more in-depth interviews and secondary data were undertaken. Primary data was collected both through questionnaires and semi-structured interviews. Primary data was coupled with secondary data such as formal studies or evaluations of the same localities under study, newspaper articles and business reports and other articles appearing in the mass media to corroborate evidence from other sources. Both quantitative and qualitative analysis were complemented by the use of triangulation as well as by an ongoing review of the literature.

CHAPTER VI RESEARCH SETTINGS

6.1 Introduction

How do footwear industrial districts deal with dramatic changes in their competitive environment? This chapter attempts to establish the different patterns of resilience of industrial districts as organisational forms of footwear production. A more thorough assessment of the network structure of the district will be provided in Chapter VII, when analysing its horizontal, forward and backward linkages as well as linkages with other organisations. This will allow us to assess how these linkages cope with endogenous and exogenous change therefore by supporting/hindering the district's competitiveness to face the "globalisation challenge". In particular, the level of embeddedness of the network structure of the district will be empirically assessed to shed light on the possible existence of socio-economic networks (if any, as in the case of industrial district type II) as well as the presence of the distinctive coordination mechanisms that are conventionally associated with them.

More precisely, this chapter will provide an overview of the international industrial context in which the two industrial districts under analysis are located. As it has been explained in Chapter IV the research mainly addresses three levels of analysis, namely the sector, the industrial district and the small firm. This chapter comprises six main sections: in section 6.2 the most salient global trends of the footwear sector will be reviewed. Section 6.3 will deal with the responsiveness of the European footwear industry. This will lead on to the discussion of responses at national level in Italy and in Britain in section 6.4. Finally, the specific profiles of the footwear sector in relation to the two industrial districts under investigation will be

discussed in section 6.5 as well as the differences in their industrial structure in section 6.6. In section 6.7 some preliminary conclusions will be drawn. Overall, this chapter will argue that the key features of the footwear sector are global competition, "dynamic volatility" and a progressive segmentation of the market: both large and small firms in different locations have to find successful ways to adapt to the implications of each of these sets of variables.

6.2 Recent trends in the global market

The footwear manufacturing industry worldwide is facing a crisis of global proportions (Spencer, 1996; Kaplinsky, 2000). The global footwear industry comprises a large market segment and products made from synthetic and natural materials. Being a labour-intensive sector, there has been a significant decline in the share of production accounted for by high income countries in recent years and in some key economies such as Germany, Britain and the US – what was once a vibrant sector has shrunk dramatically and continues to lose manufacturers and employment. As we have seen in Chapter IV, section 4.3.1 when discussing the value chain analysis of the footwear sector, producer countries with low wage are squeezing into the market and buyers in the US and Europe, and they are imposing standards of quality and speed which would have been thought unattainable few years ago. Since beating competitors like China on labour costs is hardly possible, the challenge is to produce better shoes in a faster way and to open up new market and new marketing channels (Schmitz, 1998; Pambianco, 2000).

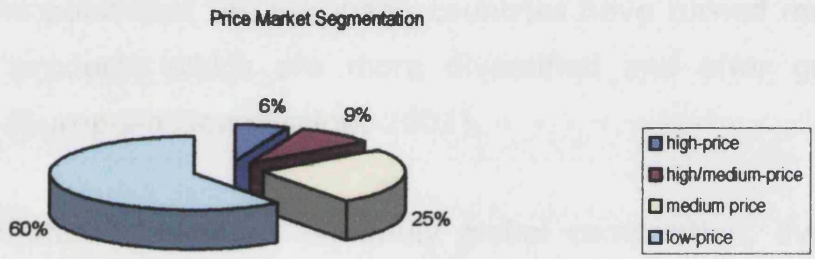
Along with global competition the footwear sector has been also affected by the so-called "dynamic volatility" – dynamic fashion trends

are causing styles to change on a monthly, even weekly basis and customers are demanding high quality, in smaller quantities, at lower prices and in less time. This dynamic volatility is steadily eroding margins and making it extremely difficult for local manufacturers to compete effectively (Spencer, 1996). With the availability of so many alternative footwear products provided by competing national and international manufacturers, educated and informed consumers are driving the remaining manufacturers to improve quality significantly and respond promptly to the ever-changing tide of fashion. Although customers increasingly expect greater variety and style changes nevertheless availability, low prices and high quality remain as cornerstones of the footwear sector. This translates into increased stress on the outdated and already strained productive capabilities of most local footwear manufacturers. Furthermore as the Panorama of the EU industry notes *'footwear is primarily seen as a necessity, and a smaller proportion of income is spent on footwear as income rises'* (European Commission, 2001).

Global competition and "dynamic volatility" have been also exacerbated by a progressive segmentation of the market. Today the consumers are more informed, more demanding and selective than they were in the past. This has lead toward a progressive segmentation of the market – the footwear sector has experienced a shift from being a "mass-market" to become a "niche-market" (Spencer, 1996; Pambianco, 2000). All footwear market niches are becoming smaller and smaller but rather homogeneous because of the increasing homogenisation of consumption patterns which is occurring as a response to globalisation (Pambianco, 2000). More precisely, whereas the footwear market can be roughly identified by two main

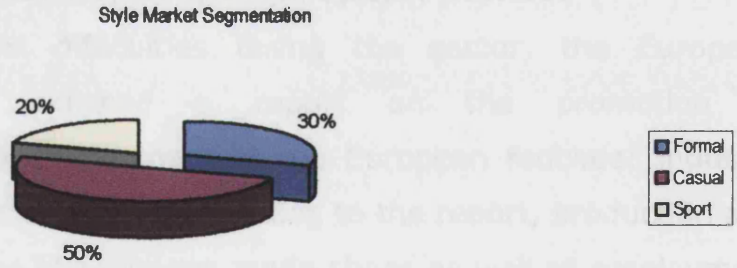
dimensions - footwear price range (high, medium/high, medium and low) and footwear style (formal, casual and sport) - the intersection of these two dimensions identifies several main market niches. The worldwide wholesale turnover of the sector is approximately 33 million pairs and its distributions in terms of both price-range and style are summarised in the charts below (see Figure 6.1 and Figure 6.2):

Figure 6.1: Price Market Segmentation



(Source: Pambianco, 2000)

Figure 6.2: Style Market Segmentation



(Source: Pambianco, 2000)

According to a recent report on worldwide footwear market published by Pambianco, one of the most authoritative advisors for the fashion industry, the sector is becoming more segmented under both profiles: price wise, the segment for medium-market products is being replaced more and more by low and high quality products and overall the

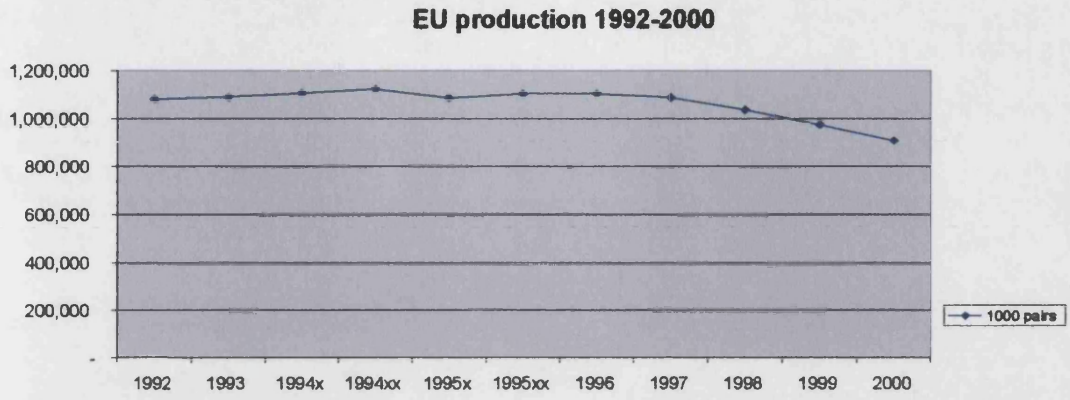
footwear market sees a significant widening of its higher and lower ranges alongside a restriction of its medium ranges; in terms of style, formal and sport shoes are gradually being replaced by casual footwear – even those firms which traditionally used to produce at the top end of the market gradually had to add less expensive casual models to their range (Pambianco, 2000). The existence of a similar pattern has been pointed out by the European Commission who also underlines the point that the European countries have turned more to high-quality products which are more diversified and offer greater added value (European Commission, 2001).

These concomitant challenges - namely global competition, dynamic volatility and increasing market segmentations - represent a threat as well as an opportunity for the footwear industry worldwide and to a greater extent for industrial districts and their constituent firms.

6.3 The responsiveness of the European market

In the view of the difficulties facing the sector, the European Commission has published a report on the promotion of competitiveness and employment in the European footwear industry (European Commission, 2001). According to the report, production and consumption patterns of European made shoes as well as employment have been all falling since the beginning of the 1990s. After a decline of 4.6% between 1997 and 1998, European production fell by a further 6.1% in 1999 and 6.9% in 2000 (see Figure 6.3):

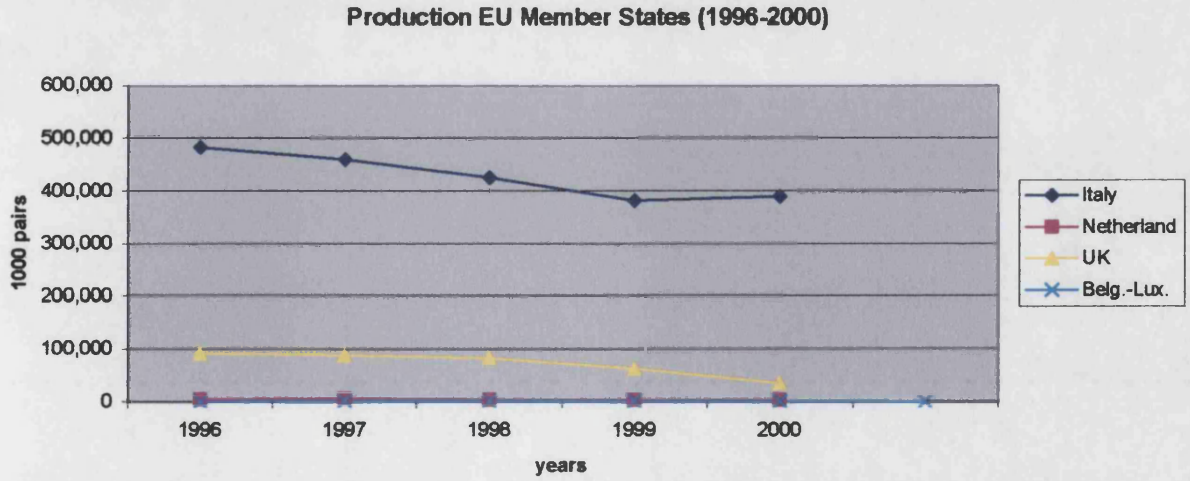
Figure 6.3: EU production 1992-2000



(Source: European Commission, 2001)

From 1999 to 2000 development varied widely from country to country: Italy and the Netherlands succeeded in boosting their output by around 2.2% to a current 389 million pairs and around 3.9% to 3.95 million pairs respectively; at the other end of the scale, production in UK (- 43.6% to 35.5 million pairs) and Belgium (- 25% to 0.56 million pairs) fell sharply. France (-13%), Germany (- 10%), Spain (- 4.8%) and Portugal (- 2.3%) (see Figure 6.4).

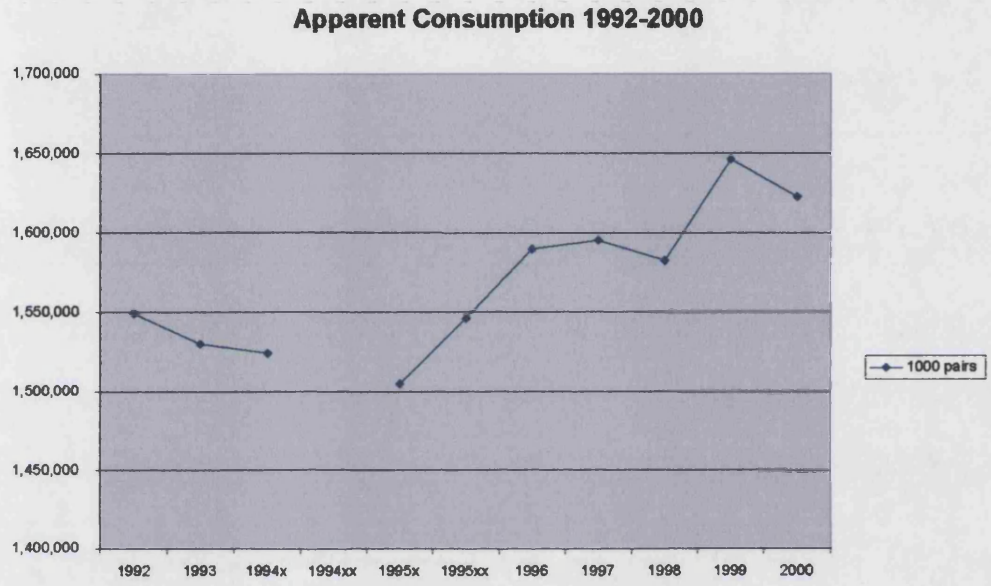
Figure 6.4: Production EU Member States (1996-2000)



(Source: European Commission, 2001)

As for consumption, the increase in apparent consumption is the overall result of rising imports (see Figure 6.5). This means that the share of European manufacturers in the European market fell from 49% in 1998 to 45% in 1999 (European Commission, 2001).

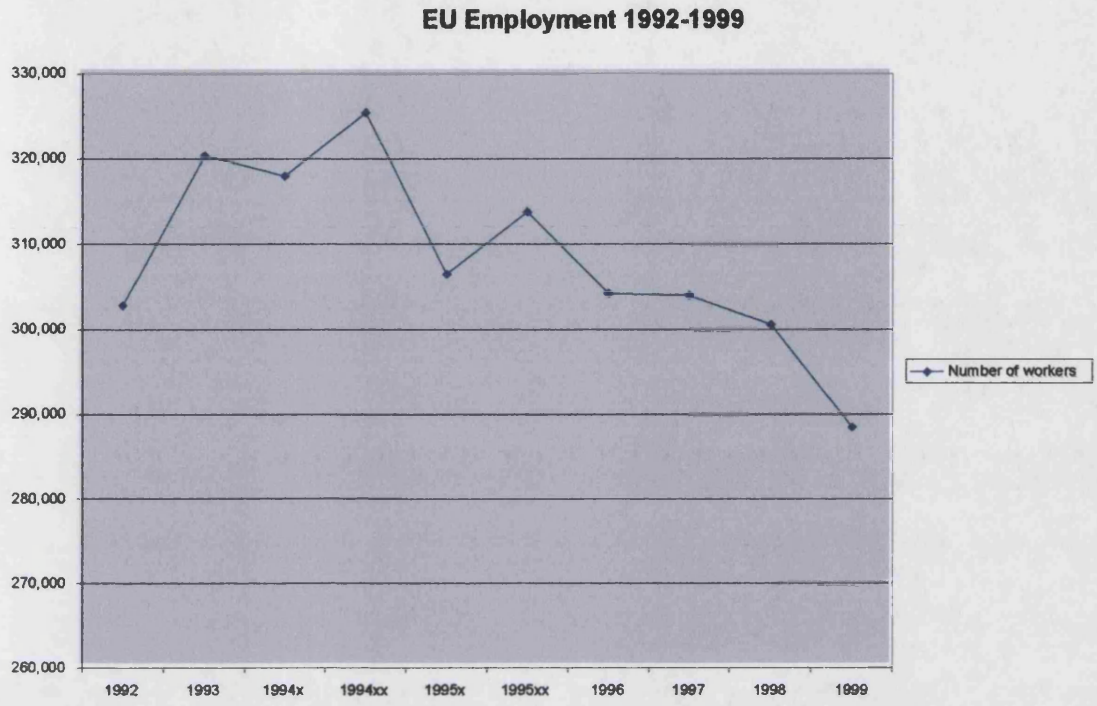
Figure 6.5: Apparent Consumption 1992-2000



(Source: European Commission, 2001)

Employment is fairly heavily concentrated in regions and localities which are highly dependent on the sector. As in many European manufacturing industries, employment in the footwear industry has fallen steeply in recent years (see Figure 6.6).

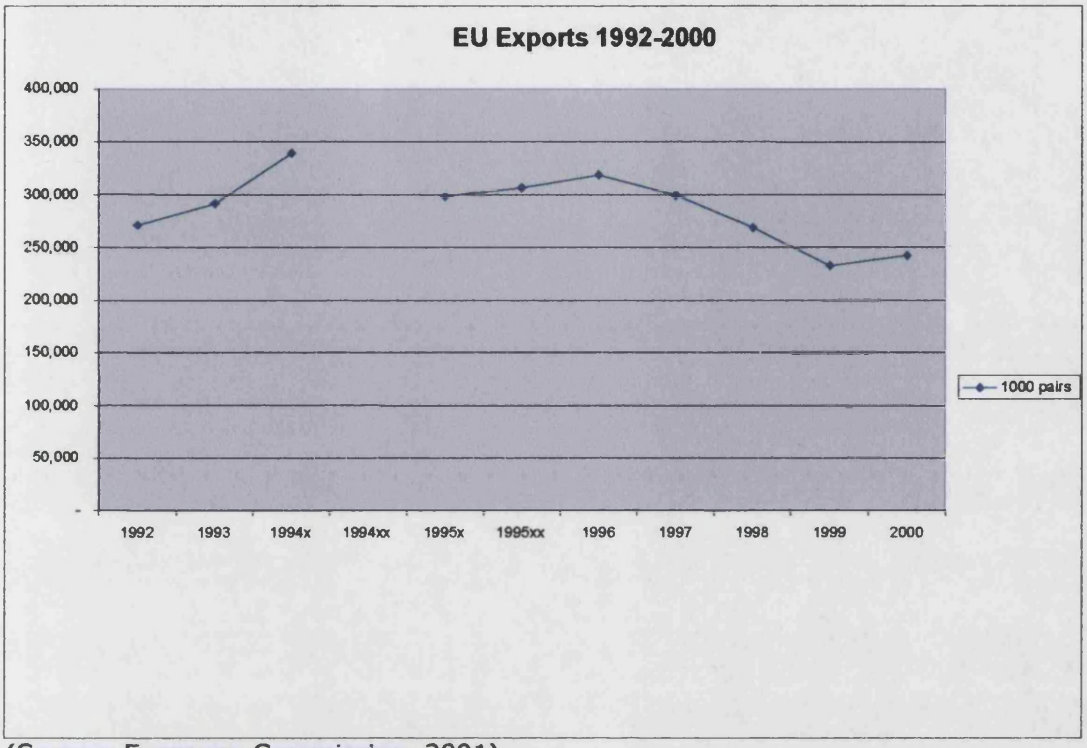
Figure 6.6: EU Employment 1992-1999



(Source European Commission, 2001)

Foreign trade, however has performed slightly better (See Figure 6.7). From 1999 to 2000, exports rose by 4.4% to 242.1 million pairs. The main customers were the US, which took delivery of 88.2 million pairs (+ 4.3%), Switzerland (24.4 million pairs/+ 1.3%), Canada (11.7 million pairs/+ 2.5%) and Japan (10.3 million pairs/ - 7.3%). The biggest rise was exports to Russia (up 49.6% to 8.4 million pairs).

Figure 6.7: EU Exports 1992-2000



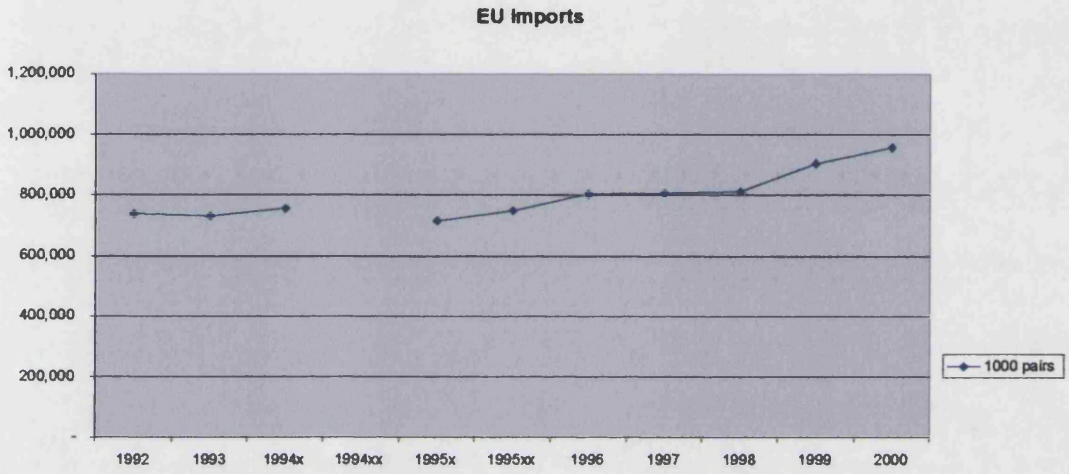
(Source: European Commission, 2001)

This suggests that those sectors of the European footwear industry which have succeeded in exploiting their competitive advantage in relation to quality, design and brand are strongly competitive on the international market – despite the severe competition from low-wage countries and the fact that many potential export markets remain virtually closed by non-tariff barriers. This can be explained by the fact that about a quarter of total EU footwear production is exported to third countries and to an even greater extent to countries whose the average per capita income is high.

Similarly imports into the EU rose by 5% to 955.9 million pairs (see Figure 6.8): China generated the main bulk (322.9 million pairs/ +6%), Vietnam (189.7 million pairs/ +6.6%) and Romania (50.4

million pairs/ +18.5%) also strongly increased their market share. Other major exporters to the EU, though with decreasing volumes, were Indonesia (62.6 million pairs/ -3.7%), Taiwan (42.1 million pairs / - 4.5%) and Thailand (33.1 million pairs/ - 2.8%).

Figure 6.8: EU Imports 1992-2000



(Source European Commission, 2001)

In recognition of the major importance of effective access to third countries' markets, and the fact that low-price imports are constantly increasing and taking an increasing share of the market, open export markets are the only means of boosting European production, or at least to maintain it at its current level (Pambianco 2000; European Commission, 2001).

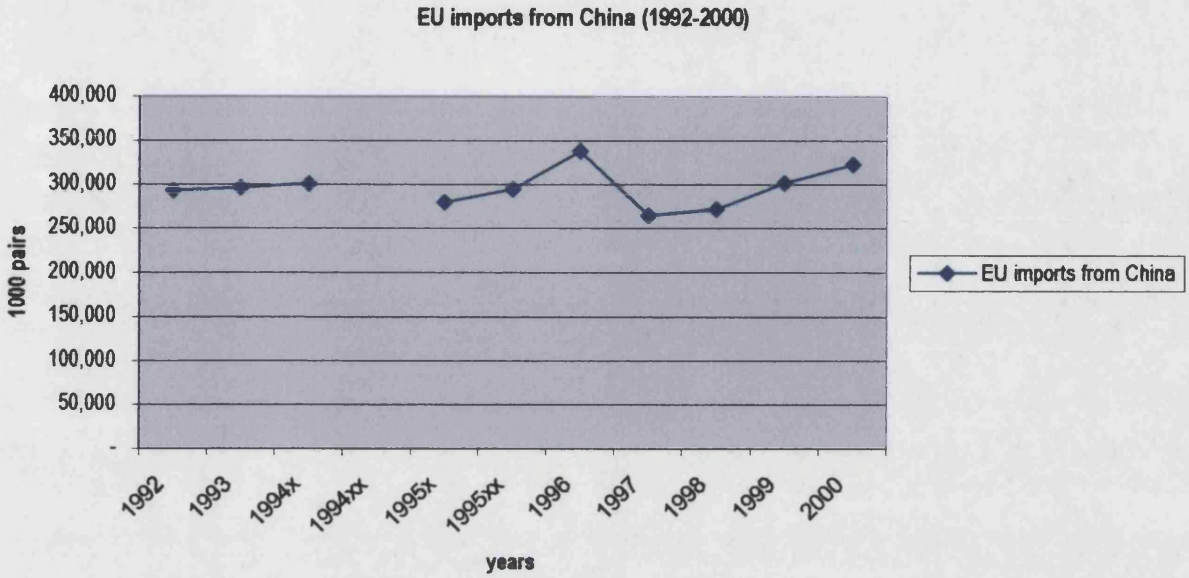
In the EU there has been little change in the degree of tariff protection of footwear manufacturers over the past thirty years. Footwear remains a relatively highly protected industry. The average tariff on EU imports of industrial products is now around 3 per cent whilst for leather footwear the tariff is 8 per cent and for footwear with non-

leather uppers the tariff is currently equal to 17 per cent. In 1976 the tariff on finished leather footwear was 8 per cent whilst that on non-leather was 20 per cent, the latter has only declined since 1994 (Brenton et. al., 2000).

In addition to customs duties, imports of footwear into EU countries have often been subjected to non-tariff measures including quantitative restrictions and voluntary export restraints (VERs) and anti-dumping measures. Prior to the creation of the Single Market there were a number of bilateral trade restrictions on imports of footwear. For example, the French and Italian industries pleaded successfully with the Commission to be allowed to impose VERs in the mid-1980s on imports of non-leather footwear from Asian countries, especially from Taiwan and Korea. The Commission justified this action on the basis that different types of footwear are substitutable in demand and that the sharp rise in imports of synthetic and textile footwear contributed directly to the fall of more than 70 million pairs in EU production of leather footwear. The removal of borders and customs duties that was necessitated by the Single Market implied that bilateral restrictions could no longer be maintained. Thus, the bilateral restrictions on imports into Italy and France were reformed into an EC-wide quota system, but which has been subsequently removed.

Today, the footwear sector remains highly vulnerable to imports from China because of their significant sheer volume (see Figure 6.9) and their growing share of the total Community market as well as the enormous difference in price between Chinese and European footwear and the huge growth potential of the Chinese industry (European Commission, 2001).

Figure 6.9: EU Imports from China



(Source: European Commission, 2001)

Furthermore it should be considered that official statistics do not take into account the considerable volume of fraudulent imports of Chinese products via other countries. In this regard the Commission's anti-fraud service OLAF conducted several investigations on this issue during the last two years (Nera and Berwin & Co., 1999). These showed that large quantities of shoes that were declared as originating from certain countries of the Middle and Far East were actually manufactured in China[17]. As for trade relations between EU and China,

[17]The same investigations emphasise how quality and originality of artistic creation are strong features of the European footwear industry although they are under threat from fraudulent practices such as deflection of trade and counterfeiting. Overall in recent years the sector has been facing fraudulent practices in which economic operators have tried to circumvent trade policy measures (such as quotas and anti-dumping measures), to benefit illegally from preferential treatment (such as that granted under the generalised system of preferences) or to cheat consumers (by claiming EU origins from products actually produced elsewhere).

China's accession to the WTO has been detrimental for the sector. By the signing of a bilateral agreement on the conditions for China's accession to the WTO (Peking, 19 May 2000), China that had customs duties of 22% to 25% on footwear products, undertook to reduce them by half the headings concerned (to 10% or 15%), while maintaining the current tariffs for the other tariff headings. This measure aimed to constitute a very marginal relief for the European market as most of its exports to China (0.14% of EU world exports in 1999) were concentrated in the sectors for which China had agreed substantial tariffs reductions. As regards quantitative restrictions, the EU-China agreement laid down, accordingly with the rules and principles of the WTO, that all quotas on footwear products had to be abolished. However, because of the high sensitivity of the European to imports from China, the complete abolition of the quotas was not planned until 2005, with annual growth rates of 5 to 15% during the transition between China's accession to the WTO and the end of December 2004 (European Commission, 2001).

The agreement that was placed in Annex 7 of China's Protocol of Accession to the WTO was countered balanced by a request from the Member States to the European Commission to introduce surveillance from 1 February 2005 and for a limited period - no later than 31 January 2006. Table 6.1 presents the results published by the European Commission of its monitoring of footwear imports to the EU from China and the rest of the world for the first four months of 2005. This close surveillance applies to six categories of footwear previously under quota. The detailed surveillance has two parts, one monitors issued import licenses (*ex ante*), the other actual imports to the EU

(ex post). The trend given by the *ex ante* monitoring gives an early warning, while data from the *ex post* system gives a comprehensive picture of what actually is imported. Data published here is based exclusively on actual imports, not import licensing.

Table 6.1 : Imports from China stratified by type of shoes

	Imports from China 2004			Imports from China 2005*			Percentage Change		
	January - April 2004			January - April 2005			Imports in 2005 as a percentage of imports in 2004		
	FOR EU 25			FOR EU 25					
	QUANTITY	VALUE	UNIT PRICE	QUANTITY	VALUE	UNIT PRICE	QUANTITY	VALUE	UNIT PRICE
Textile Shoes	15.085.355	42.227.690	3,57	110.883.528	215.451.162	1,94	735%	510%	-46%
Leather Shoes Type 1	17.207	219.000	12,73	243.411	2.319.281	9,53	1415%	1059%	-25%
Leather Shoes Type2	111.747	683.030	6,11	1.518.146	12.808.499	8,44	1359%	1875%	+38%
Leather Shoes Type 3	303.419	3.555.320	12,26	2.406.840	22.074.957	9,17	793%	621%	-25%
Leather Shoes Type 4	4.308.371	38.282.200	8,83	34.388.629	216.068.829	6,28	798%	564%	-29%
Textile Slippers	3.946.413	5.395.620	1,37	12.484.461	12.552.906	1,01	316%	233%	-26%
Total January-April	**23.772.512**	**90.362.860**	**4,13**	**161.925.015**	**481.275.634**	**2,97**	**681%**	**533%**	**-28%**

(Source: EC Press release IP/05/696, 8 June 2005)

These figures show that in particular Chinese footwear imports in these six categories have risen steeply compared with the same period in 2004.

6.4 National markets: Italy and the UK

Since the 1980s the Italian and the British market present quite opposite trends in terms of production, import and export:

Table 6.2: Production, Import and Export

Italy	1980	1985	1990	1999	2000	2001	2002
Production	276.5	371.6	320.2	381.13	389.9	375.2	335
Import	54	75	193	182.32	196	203.1	224.7
Export	200.4	292.6	245.2	346.8	362.4	326.14	322.3
UK							
Production	61.7	53.5	56.2	63	35.5	34	28
Import	47.4	64.9	50.6	290.2	280	346	315
Export	12.1	9.5	8.6	38.4	37	32	31

(Source: Rabellotti, 1997; ANCI, 2002; BFA, 2002 – 1,000 pairs)

Most of the economic literature on globalisation has focused on the impact of trade upon relative wages and relative employment opportunities for unskilled workers across countries. This has been based upon the observed worsening of the fortunes of less-skilled workers in many industrialised countries and the Hecksher-Ohlin-Samuelson (HOS) model of international trade. According to this model, countries tend to export those goods that are relatively intensive in the use of the country's abundant factor, and import those goods that are relatively intensive in the use of the country's scarce factor. In this way, capital-rich countries will tend to export relatively capital intensive products, and import labour intensive products, and vice-versa for labour abundant countries.

This theory has been widely adopted despite rather shaky empirical support. In this perspective globalisation leads to a reallocation of resources in countries from import competing, low-skills intensive industries to the skill intensive sectors in which these countries have a comparative advantage (Slaughter, 1998; Woods, 1998). However, Brenton, Pinna and Vancauteren (2000) suggest for instance that this

paradigm is inappropriate for an adequate assessment of the impact of globalisation across countries. Firstly, for many of the unskilled intensive sectors such as footwear, as the import penetration ratio has increased so has the ratio of exports to output. In the classical HOS model countries either import or export the same product, not both. Secondly, even in low-skill intensive sectors the possibility of sector adjustment by producing different and higher quality products exists and this provides another means of adjustment to globalisation not possible within the standard model. Third, there is a range of experience across countries in the evolution of low-skill intensive sectors. In some countries certain sectors have maintained employment and output (e.g. Italy) whilst in other countries production has declined dramatically (e.g. Britain). If the trade shock from globalisation is common across countries then this suggests that a variety of responses to globalisation are available to firms in different countries. The following sections concentrate upon how adjustment to globalisation has taken place in Italy and the UK and confront the diversity of their experiences.

6.4.1 The Italian market

Italy is the leading shoe manufacturing country in the European Union, it also holds fifth place amongst worldwide footwear manufacturing countries and is the third largest exporter of footwear in the world. This is an indication of the success of the Italian footwear sector which, with its 7,570 firms and 113,000 employees, is of considerable importance to the Italian economy and represents one of the leading sectors in the Italian fashion industry (Rabellotti, 1997). The success of the footwear sector in Italy is linked to Italian entrepreneurship and to the structure of the sector which consists of sub-suppliers of raw

materials; tanneries; manufacturers of components, accessories and shoe making machinery; and model makers and designers.

The structure of the sector has resulted in a geographic concentration of companies in the so-called "shoe manufacturing districts". The main districts are in the Lombardy, Veneto, Marche, Emilia-Romagna, Tuscany, Campania and Puglia regions and cover twenty-three provinces. The leading position of the Italian shoe industry on the international market is due to the high quality of the product and the elevated capacity for innovation. The characteristics that distinguish Italian production in the footwear sector are: the high number of manufacturers, the small average of firm size and the spatial concentration in few industrialised areas. Other features are creative talent; innovation of traditional manufacturing methods; skilled labour, produced by professional training schools; raw materials; accessories and components that are in the forefront of the field for technology and design; flexibility resulting from the geographic concentration and size of the firms; a wide range of designs to suit current trends and satisfy customer demands; customer service and the "Made in Italy" image.

The recent history of the Italian footwear industry can be divided into four main periods: first a long period of expansion from the beginning of the 1960s to 1985, a second period of crisis and subsequent restructuring until 1992, a third period of recovery corresponding with the devaluation of the Lira until 2000, and a fourth period of negative trend (Rabellotti, 1997).

The outstanding growth of the Italian footwear industry led by exports, begun in the 1960s and went on continuously until 1985. During the 1960s Italy exploited a labour cost advantage with respect to other European competitors. For Italy, employment in footwear remained roughly constant throughout the 1970s and early 1980s (Brenton et. al., 2000). The high specialisation of the Italian footwear industry, based on the division of production among several firms, and on the existence of a very well developed network of backward linked firms producing components and raw materials, became the main source of competitive advantage (Rabellotti, 1997).

By the mid-1980s, other countries namely Spain, Portugal, the former Yugoslavia, Taiwan, South Korea, Brazil, India and China became very competitive and increased their export share. In order to face the increasing competition, the Italian industry undertook a profound restructuring in order to strengthen its advantage in terms of image, fashion content and design as well as attempting to reduce the price elasticity of demand for its products by trying to increase exports in the medium-high and high segments of the market. Exports reached their peak in 1985 while from 1986 onwards exports decreased gradually until 1992. Following this phase of restructuring, between 1985 and 1992 there was a 10 per cent reduction in the level of employment in the Italian footwear sector (Brenton et. al., 2000).

However, after 1992 there has subsequently been an increase in employment with a return to the numbers employed in the 1970s (Brenton et. al., 2000). From 1992 to 2000 thanks both to the continuous upgrading of the quality and the devaluation of the Lira, exports increased significantly. The European Union was traditionally

the most important market for Italian footwear. In 1993 sales to EU countries accounted for 62 per cent of all exports in quantity and 59 per cent in term of value (Rabellotti, 1997). After the EU, the US was the second most important market, although since the end of the 1980s until 1992, the Italian exports have been penalized by the revaluation of the Lira against the Dollar.

Along with the recession faced by the sector, the results obtained by the industry from 2000 onward have shown a significant reversal of the positive trend of the previous years. Production figures have fallen to 335 million pairs in 2002, a decrease of 14.1 percent over 2000. Export figures have also shown negative results compared to 2000: 322.3 million pairs, a decrease of 11.1 percent. Of the countries towards which exports are traditionally high, only Germany has shown a marked decline (-17.5% percent both in volume and in value) although it remains Italy's most important export market. Exports to the US have been also losing ground (-12.4%), to the Netherlands (-14.6%), to Switzerland (-19.8%) and to Belgium (-9.5%). Imports have increased by 14.7 percent in quantity totalling 224.7 million of pairs and 2,242 million Euros. Once again, the main suppliers were China (over 67 million pairs), Romania and Vietnam (20 million pairs each).

As for the future, unless a dramatic change in fashion occurs, the popularity of a few well-established brands is expected to continue in Italy in the near future (Pambianco, 2000). However, the high value of the euro *vis-a-vis* the dollar will make some Italian footwear too expensive to be exported to the US market. According to Pambianco, the competition from East Asian manufacturers will be particularly

strong in the sport shoes sector, which had been a strong niche for Italian exporters to the US in recent years (Pambianco, 2000).

6.4.2 The British Market

Britain is the fifth largest producer of footwear in the European Union. 12,000 people are employed in completed footwear manufacturing, with a further 5,000 in supplier and allied trades (BFA, 2002). The British footwear industry is worth about £1.5 billion of which £532 million is exported. Despite the strong pound exports continue to rise in this sector. In recent years, British firms have been moving upmarket, and have exported record amounts of quality footwear. Main export markets after the USA are Eire, France, Germany, Italy and Japan (BFA, 2002).

The British completed footwear industry consists of a number of distinct sub-sectors, with some firms active across two or more of the sub-sectors:

- Branded companies: higher value footwear typically provided with an instock service to retailers;
- "Made to order" firms: firms producing own label footwear to customers' designs with large production runs;
- British Goodyear welted: a stitched construction method - the speciality of Northamptonshire firms;
- Safety footwear: the supply of protective footwear bearing a CE mark conforming to exacting specifications;
- Wellingtons: suppliers of pvc/rubber moulded footwear for home and work;
- Slippers: suppliers of household footwear usually made of textile materials;

- Designer wholesalers: companies headed by a strong design and marketing team who outsource production;
- Orthopaedic/bespoke: footwear made on individual lasts for special needs not met by mass production firms;
- Component manufacturers and service providers to the above.

The British footwear retail market is dominated by multiple chains, with only about 10% supplied by independent retailers. Imports account for 99% by number of the shoes supplied to the market, and the strength of the Sterling coupled with competition on the high street has seen the index of footwear retail prices (IRP) rise only 17% since 1987 compared to a 67% inflation rate for the all-items IRP over the same period (BFA, 2002).

The British footwear manufacturing industry is concentrated in six main areas: the counties of Northamptonshire and Leicestershire, the South West of England, the Norwich area, Lancashire and London. Britain is home to some of the world's leading footwear brands and most competitive "made to order" firms. The industry has a £2.3 billions annual turnover at ex-factory prices and exports over 90% its production around the world (BFA, 2002).

The recent history of the British footwear industry can be divided into three main periods: first a long period of decline from the beginning of the 1970s to 1990, a second period of remarkable recovery which reached is peak in 1999 and a third period of negative trend.

In the UK, the number of workers employed in footwear has been declining continuously since 1970. In order to protect the sector, a number of quantitative restrictions were imposed by Britain in the late

1970s and early 1980s on imports of non-leather footwear from the Far East and imports of leather footwear from Central and Eastern Europe. Despite these quantitative restrictions, employment loss continued throughout the 1980s and by 1997 only 43% of the number of jobs was retained (Brenton et. al., 2000). In particular there has been a loss of manual employment which has occurred consistently since the 1970s although it has generally been more pronounced in the period since 1985 when quantitative restrictions were reduced and import penetration from Spain, Portugal, the former Yugoslavia, Taiwan, South Korea, Brazil, India and China has increased strongly.

This suggests that non-tariff trade barriers have not been successful in preserving employment in the British footwear sector and have been an extremely expensive means of protection. Brenton and Winters (1993) and Winters and Takacs (1991) analysed the effects of a number of quantitative restrictions imposed by Britain in the late 1970s and early 1980s on imports of non-leather footwear from the Far East and imports of leather footwear from Central and Eastern Europe. Their findings suggest that in 1979 when all the restrictions were in place the total cost of a job saved in the British footwear sector was nearly twelve times annual wages every year for each year that the specific protection was in place.

Since 1985 there has been a visible increase in the employment of non-manual workers, whilst manual employment has continued to plummet (Brenton et. al., 2000). The observed increase in the relative use of skilled labour could reflect an attempt by the British industry to upgrade its production and to concentrate upon the production of high quality footwear and design intensive activities.

Since 1990 the British sector has experienced a remarkable recovery: production rose to 63 million pairs in 1999, a 12% increase over 1990; import have been rising dramatically over 1990 totalling 290.2 million of pairs in volume. Exports and re-exports of footwear from Britain doubled in value throughout the 1990s reaching their peak in 1999 when the reputation of British brands in global markets was the main high point of the industry helped by a fertile design education system. A significant factor since the mid-1990s has been the replacement of the High Street empire of British Shoe Corporation Ltd with a number of smaller multiples.

Along with the recession faced by the sector, the results obtained by the industry from 2000 onward have shown a significant reversal of the positive trend of the previous year. Because of the British opt-out from the euro, manufacturers have been severely hit by the strong pound and by a frail world demand for British export. As a consequence, Production figures have fallen to 28 million pairs in 2002, a decrease of 46% over 1999. Export figures have also shown negative results compared to 1999: 31 million pairs, a decrease of 19.3%. Imports have increased by 8% in quantity totalling 315 million of pairs (BFA, 2002). Although the rise of import penetration has been the major trend for UK manufacturing, the patterns of imports have also changed. Some traditional sources, such as Hong Kong — still the overall leader — and India, have come under threat from emerging supplier countries from many parts of the globe — Turkey, Morocco, Romania, Brazil and, above all, the Far East countries that offer low-cost production facilities such as the Philippines, Indonesia and China (Key Note Report, 2003). The pattern has been made complex by the trend for British manufacturers to establish factories outside Britain, a major feature of the 1990s, even for relatively small companies.

Recently, the supply sector has been fairly stable, but some consumers are now shifting towards more expensive designer and "quality footwear", which accounts for the value growth in a mature market where volumes of sales are fairly constant. Notwithstanding footwear is a basic necessity its share of total consumer spending has fallen from 1% to 0.7% over the past 10 years. The main reason for this is falling prices, with the typical pair of shoes bought in 2002 costing 8% less than they would have cost in 1995. Inflation has generally been low in this period, the lower footwear prices have come from the shift to imports from low-cost labour countries. This has seen imports take a share of over 90% of the UK market (Key Note Report, 2003).

British manufacturing has been badly damaged by the rise of imports, and the industry has become used to this over many decades. The remaining larger manufacturers are led by two family-owned companies, C&J Clark Ltd (Clarks brand) and R Griggs & Co. Ltd (Dr Martens). However, many smaller firms continue to compete in specialist products, (e.g. safety) and hand-made, expensive footwear. Many of these are heavily geared towards exporting.

The UK also has a growing number of designer companies, the main business of which is to design and market fashionable footwear, and then contract out production and distribution, usually overseas. This process is also typical of the world's largest companies, which are led by the sports footwear giants Nike, Reebok, Adidas and Salomon. Sports shoes used for casual wear account for over a quarter of the market, reflecting the age of "dressing down".

For the next five years, Key Note anticipates that at present there is no real reason to predict any major changes to the market which is

likely to stagnate. According to the report, the trend towards foreign sourcing — involving the closure of British factories and the transfer of production abroad — will be also matched by a complete loss of capacity and jobs in footwear (Key Note Report, 2003).

6.5 Footwear industrial districts

How do global forces shape industrial districts in different ways? Is it possible to determine those factors which drive the distribution of the gains from footwear global production, explaining both why some experiences proved to be more successful than others? This section attempts to provide a more profound understanding of the factors underpinning the economic dynamism of the two industrial districts under investigation. Clearly the response to globalisation and to greater competition generally in the footwear sector has not been uniform across the EU.

In some countries such as Britain, increasing imports has played a very important role and domestic employment has declined sharply. Elsewhere in Italy for example, domestic output and employment have been maintained. In Italy, increasing competitive pressure from emerging low-wage countries forced the domestic footwear sector to diversify its production by increasing its specialisation in high quality goods which do not compete directly with low quality goods from emerging countries. On the contrary Britain has heavily relied on protectionism in the past and only recently has undertaken a similar pathway. Drawing on the diversity of these experiences, it is therefore possible to reach some preliminary conclusions on the potential trajectories that footwear districts can undertake in order to survive and prosper. The differences in the industrial structure of the two

districts will be discussed in section 6.6, while some conclusions will be drawn in section 6.7.

6.5.1 Montebelluna: Overview

Montebelluna is a small village located within the Treviso province, in the Veneto region (see Figure 6.10). In the last twenty years, the Veneto economy has become an "international example", to the extent that the economic development of the region has been termed as the "Veneto miracle" to refer to its particular model of economic growth.

Figure 6.10: Montebelluna

The load-bearing structure of the Veneto economy is represented by a wide-spread and capillary web of small firms, characterised by great flexibility, remarkable speed of initiative and responsiveness to demands from the world market. The main production is manufacturing and includes a vast number of sectors standing out for their high degree of diversification and specialisation. These are:

- Clothing, textile and footwear sectors, almost a synonym for goods "made in Italy" over the world;
- Metal-engineering sector, the most important in terms of number of firms and employees;

- Wood-working and furniture sector, representing a sector of considerable importance also on a national scale.

Small firms are also specialised in the production of machinery and technology for the processing of marble and granite, the textile industry, the leather tanning sector, the building industry, wood processing, and the heating and air-conditioning sector. The original agricultural vocation has succeeded in renewing and modernising its methods, channelling its efforts towards top quality production carried out by an agro-industrial system that is responsible for about 38% of the region's GDP (Treviso Chamber of Commerce, 2000). In tune with its economic development, recent years have also seen the major developments in its service sector, which now ensures valid support for the regional production system. The Veneto region also displays a vibrant tourist industry holding the national record for this sector (Treviso Chamber of Commerce, 2000).

Treviso represents one of the most innovative areas in Veneto and Northern Italy in terms of economic-productive development and social integration. These area possess a pool of entrepreneurial and financial resources as well as professional capabilities that are accredited as a being the key-features of a model emblem at national level. Treviso's exports alone represent a quarter of the Veneto's exports, and its positive balance of trade makes up for a fifth of whole Italy's (Treviso Chamber of Commerce, 2000). The reasons for this high local productive competitiveness can be searched in the physiognomy embraced over the years and the characterisation of a widely spread entrepreneurship in the province. Nonetheless, the presence of several well-established industrial districts plays a crucial role for the economic

dynamism of this area. Firms and a strong network of different organisations successfully work along side to increase competitiveness and export capabilities.

Montebelluna for the footwear sector and Opitergino-Mottense for the furniture industry are the most representative among these districts. In addition, Treviso posses three specialised productive areas solidly tied to the territory: the engineering and lighting district in Castelfranco Veneto; the stainless steel district often referred as "the inox valley" between Conegliano and Vittorio Veneto, where components and steel grouping production started as an appliance correlated industry while now it has a remarkable share market on its own; and the fashion sector (textile, clothing, knitwear) where some large firms such as Benetton and Diesel operate. In particular, the employment trend has a positive average rate much larger than the national average with a small frictional unemployment rate of 4.1% (Treviso Chamber of Commerce, 2000). Treviso is among the five Italian provinces with the highest incidence of manufacturing employment, especially in the engineering industry (Treviso Chamber of Commerce, 2000).

Montebelluna (see Table 6.4) belongs to the Treviso province and is a small town located approximately 30 miles from Venice. Nowadays it is a shoe manufacturing centre of world importance. The "sport-system district" is one of the most vibrant in North-Eastern Italy, an area that researchers and analysts from all over the world have extensively researched to better understand the origins of the so-called "Veneto miracle". As it will be discussed in the next section, the district has a long tradition since the early XIX century. The birth of this industrial

district *'has its roots in the business of nine Montebelluna cobblers who manufactured first walking shoes and later tramping boots for visitors making their way from Venice to the Alps in the early nineteenth century'* (Mitchell, 1997: 11). In this sense the birth of the district could be traced back to large extent to particular domestic demand conditions but also to some location factors such as the presence of local well trained artisans as well as a plentiful supply of water (Belussi, 2003).

Montebelluna today displays the existence of a critical mass of spatially concentrated and sectoral specialised firms: approximately 600 companies (500 producers of footwear and 100 producers of clothing) with a total of 8,000 employees work in this sector (6,000 employees in footwear and 2,000 in clothing). The number of small and medium firms is an indication of the solidity of the district: the average number of people employed in local manufacturing firms is 24, three times higher than the Italian average in the footwear industry (Coro' & Grandinetti, 2001). In the last few years, sports clothing has been added to the 32,800,000 pairs of footwear in 1998 to reach a global turnover of 2,200 billion liras (Treviso Chamber of Commerce, 2000). Both the fragmentation of the production on global scale as well as production within the district encompass several stages (Porter & Van der Linde, 2004).

The competitiveness of the district is well-known – Montebelluna is considered one of the world's strongest district (Porter & Van der Linde, 2004). As for the comparison with the world production, Montebelluna accounts the following market shares: 25% in-line skates; 50% trekking shoes; 65% after-ski shoes; 75% ski-boots;

80% motorcycle boots. The district's motto is in fact '*Montebelluna can make the world play*' (Durante, 1997). As for the national share of production in this area, 60% of national overall production of sport shoes, 60% of cycling shoes and 80% of ice-skates and in-line skates are produced (Treviso Chamber of Commerce, 2000). In this sense, the position of Montebelluna can be defined as predominant if compared against other districts in the country (Porter & Claas van der Linde, 2004). By contrast the local importance of the district is still dominant but far more modest, accounting 27.5% of local manufacturing firms in 1991. Whereas the district has displayed neutral growth from 1981 to 1991 (Paniccia, 1998), footwear production, import and export have been increasing from 1980 to 2002 (Table 6.3)[18].

Table 6.3: Montebelluna - Production, Import and Export

Montebelluna	1980	1985	1990	1999	2000	2001	2002
Production	69.13	92.9	80	95.3	97.5	93.8	83.8
Import	13.5	18.75	48.25	45.6	49	50.77	56.17
Export	50.1	73.15	61.3	86.7	120.8	82	80.6

(Source: ANCI, 2002 - 1,000 pairs)

One of the reasons for Montebelluna's success lies in the firms that are involved in sub-contracting and in other activities supporting the footwear manufacturers, especially the production of plastic, casts and soles. Many of these firms have been able to develop high levels of excellence and to undertake independent internationalisation paths (Coro' & Grandinetti, 2001). The existence of a very well developed system of suppliers working for the footwear sector has been identified by Rabellotti (1997) as one of the main assets of Italian producers as it has allowed them to be competitive in a market recently

[18] Unfortunately, data for the value of production, import and export were not available. To this end, data based on number of pairs of shoes could be used as a proxy for international competitiveness.

characterised by stagnant demand. In particular, the ability of suppliers to provide a wide variety of products within short delivery times presents several advantages: first, it allows producers to postpone their purchase of inputs until the very last minute; secondly, it reduces the inventories required for producing shoes; third, it leads to the progressive shortening of the time between order and delivery; finally, it increases the capacity of producers to diversify their products and satisfy market demand. This explains why the production of shoes with a low technological content is partly carried out in Eastern Europe or the Far East, whereas for shoes with a technological content such as ski-boots, motorcycle boots and football shoes are still entirely produced domestically (Belussi, 2005).

Belussi for instance notes that in Montebelluna increasingly firms that in the 1990s started to outsource to Romania, have more recently moved there setting up manufacturing facilities to the extent that Timisoara has been defined as the eighth province of the Veneto region (2003). Although firms tend to decentralise mainly within the local area, it is worth pointing out that increasingly some of the larger firms decentralise a great volume of assembling operations abroad while they keep the bulk of intermediate processing domestically (Amighini & Rabellotti; 2003). This especially affects the production of shoes with a low technological content, whereas for shoes with a high technological content such as skiboots, motorcycle boots and football boots, they are entirely produced domestically (Coro' & Grandinetti, 2001).

The district is also characterised by extensive mobility of highly specialised workers to the extent that a flourishing artisan tradition has been considered a natural characteristic of the area (Paniccia, 1998). Montebelluna displays a varied productive fabric made of MNCs and foreign firms (Nike, Salomon, Adidas, Rossignol, Fila, Invicta and others) some national large firms (such as Geox and Stonefly), small firms either working as suppliers, independent producers as well as subcontractors (Belussi, 2005). Increasingly there are some local small firms that become specialised suppliers in machineries and industrial service as well[19].

Two types of related industries are consolidating – a competitive related industry made of the production of a wide range of sport shoes that share common inputs, skills and technology; a complementary related industry made by the emerging fashion industry. The presence of these two related industries is considered to be very advantageous for Montebelluna's industrial competitiveness (Porter & Claas van der Linde, 2004). Overall the international competitiveness of the industrial district under investigation seems to be supported by its evolution and more precisely to the presence of pioneer leading firms which have introduced important radical innovations in the past and that give rise to international dominance of the district for the production of the ski-boots.

[19] Although the data on the stratification of the district by company size was available for Montebelluna, the relevant tables are presented in the Appendix because of their limited value in terms of comparability since the equivalent information was not available for Northampton.

The district relies on the presence of several local institutions. In particular the Museo dello Scarpone (Boot Musueum) is a place where firms can meet and exchange information. It organises training for managers and technicians, gives assistance in setting up research projects, safeguard the history of shoemaking and has become an agency for the promotion of the district. The Chamber of Commerce of Treviso has also had some relevance for developing marketing project for the area and setting up an agency in Montebelluna that supports the relationship between technology and industrial design.

A closer look of the historical evolution of the industrial district will be provided in the next section. As shown below in Table 6.5, in Montebelluna the "minimal requirements" identified in Chapter III section 3.2.5 - geographical concentration, sectoral specialisation and the presence of business networks – are definitely satisfied.

Table 6.4: Montebelluna key indicators		
	Evaluation	**Comments, Explanation**
Location	Montebelluna, Treviso, Italy	
Geographical span	Town	
Critical mass of firms	500	
Employment	6,000	
Main sector	Footwear	
Number of vertical stages	Several stages	A wide variety of sports shoes
Competitiveness	World's strongest district	Make two-thirds of world's high tech ski-boots and boots for motorcycling
National share of production	Predominant (>50%) if compared against other districts in the country	
Share of local economy	Dominant (20-50%)	27.4% of local manufacturing firms in 1991
Annual growth	Neutral (0-2%)	From 1981 to 1991
Skilled labour	Human resources displaying highly specific skills	
Specialised Suppliers	Some present	Some firms specialising in machineries and industrial service
Competitive related industries	Very advantageous	A wide range of sport shoes that share common inputs, skills and technology
Complementary related industries	Very advantageous	Fashion industry

Table 6.5: Montebelluna "minimal requirements"	
Geographical concentration	Geographical span: town
Sectoral specialisation	Sport footwear 600 companies (500 producers of footwear and 100 producers of clothing) with a total of 8,000 employees work in this sector (6,000 employees in footwear and 2,000 in clothing).
Business networks	Mobility of highly skilled labour Strong backward linkages Presence of related industries

A more thorough assessment of the network structure of the district will be provided in Chapter VII, when analysing its horizontal, forward and backward linkages as well as linkages with other organisations. This will allow us to assess how these linkages cope with endogenous and exogenous change therefore by supporting/hindering the district's competitiveness to face the "globalisation challenge". In particular, the level of embeddedness of the network structure of the district will be empirically assessed to shed the light on the possible existence of socio-economic networks (if any as in the case of industrial district type II) as well as the presence of the distinctive coordination mechanisms that are conventionally associated with them.

6.5.2 Montebelluna: Historical developments

In the fourteenth century, by becoming part of the Republic of Venice the Montebelluna shoe manufacturing heritage merged with the flourishing Venetian tradition. In Venice, services and manufacturing represented the most undertaken activities along side with mercantile and maritime trades and were organised in associations and corporations.

During the seventeenth century, Venice suffered a severe crisis striking the most important sectors, so Venetian products gradually lost competitiveness to foreign goods and arts and crafts declined. The final strike was inflicted by Napoleon's empire and then by the Austrian one. Over this period of time, the shoe-maker's guild disappeared and only shoe repair workshops managed to survive. Three mainland districts continued the tradition: Stra, specialised in woman pump shoes; Verona for fine shoes and Montebelluna for sports footwear.

At the end of the nineteenth century, Montebelluna was a country village and its market was the heart of its economy. Founded by Emperor Frederick Barbarossa and privileged by the Republic of Venice, Montebelluna became soon a popular meeting point. A flourishing market affected the footwear manufacturing growth so that on weekly basis hides for uppers and finished products were hand-crafted. Each "shoe-maker" had a distinctive style and every product was highly differentiated. At the beginning of XX century there were 200 workshops: one family out of eight was involved in the footwear sector (Treviso Chamber of Commerce, 2000). The range of products that were available on the market visibly expanded. Mountain climbing started to emerge as a sport, especially because of the surrounding

Feltre and Belluno mountains and this spurred a demand for mountain shoes.

After World War I, Montebelluna finally consolidated its shoe manufacturing vocation. Mountain trekking shoes became a product demanded by a specific array of consumers – many Italians who became familiar with the Dolomites during the weeks of warfare, wishing to go back as excursionists.

By making suitable modifications, the mountain trekking shoe was also used in skiing. In the 1930s, fondness for this sport increased and required a specific product for that particular use. Montebelluna grabbed this opportunity and started the first diversification. The ski-boot, along side with the traditional mountain boot, led and profoundly affected the evolution of the district for most of the second part of the XX century. The production of the ski-boot saw the birth of the first example of ski-boot production through a the factory system, with the birth of Tecnica (1890), Dolomite (1897), Alpina and Munari (1908), Pivetta and Vendramin (1919) and Nordica (1926). Most of these firms are still in activity (and they have become with time, the leading firms in the area) or the brand name is still used (Belussi, 2003).

In more recent times, the imitations of innovations that were developed by competitors outside the district seemed to be the main evolutionary pattern in the Montebelluna district (Grandinetti, 2003). This change was the beginning of the longest development phase in history of the Montebelluna district. During the winter 1965-66, Bob Lange an American technician from Colorado designed a ski-boot completely made of plastic. Montebelluna entrepreneurs believed that

plastic could have been a marketable material and the local firm Nordica improved the American invention by replacing the "casting" process with "injection", using some competences from a firm situated in Padua (Belussi, 2003).

Plastic was the true revolution – the market boomed from 250,000 pairs in 1960 to 4,100,000 pairs in 1979 (Treviso Chamber of Commerce, 2000). By imitating an American firm that had already used plastic materials for the production of ski boots, Nordica was able to recognise the value of a new technology, absorb the external knowledge and improve it, replacing the previous process with the new one. Overall, only one firm was able to promptly take advantage of the new technology and face the complexity of a change discontinuity. Nevertheless, the district was able to cope with the competitive challenge: in a short time the innovation cycle spread through the district network thanks to imitation of the main local firms that followed the pioneer and the conversion of a number of small firms into new specialised activities (Grandinetti, 2003). Many historical firms adopted the new technology (Nordica, Dolomite, Munari, San Giorgio and Tecnica).

But the introduction of plastic did not appeal to every entrepreneur. Due to economic difficulties or cultural mistrust, some manufacturers decided to produce alternative sports footwear: after ski, football, tennis, motorcycle, bicycle, ballet, cross country ski and ice skating. This radical change also produced a new division of labour between the final firms, the subcontractors for the more simple tasks and the producers of technology (specialised suppliers). At the end of the 1970s the number of district firms, specialised in footwear production

grew to 511 firms, occupying 9,710 workers in the ski-boot production and 12,000 as a whole in the sport system sector (Belussi, 2003).

The second diversification took place - the old mountain boot was revolutionised becoming lighter and brighter and it was transformed into the after-ski boot, made in plastic material. The first model was called 'Moon boot' by Tecnica in 1970, which was inspired by the astronauts that on that year flew to the moon. In a few years the production of after-ski boots took off – at the end of the 1970s Montebelluna was producing about 7.5 – 8.0 million pairs. The third diversification was quite parallel and involved sport shoes for jogging, ice and roller skates, basketball, football, motocross, dancing, cycling, tennis and leisure shoes (Grandinetti, 2003). In February 1979, Newsweek dedicated an article to Montebelluna by defining the district as the capital of the "snow industry".

At the beginning of the 1980s Montebelluna began to experience signs of crisis due to over production. However, this setback was timely replaced by another product diversification - the "trekking shoe". At the same time, many companies started to display an interest in the sportswear clothing sector. As the ski-boot crisis persisted over time, a new product seemed to point the way of overcoming the impasse: the in-line skates. By using the boot synergic technology, in-line skate became a substitution and integration for the summer seasons. In the last few years in the Montebelluna production has been extended to two other products: snow-board boots and city footwear. The latter saw the birth of two emerging local champions, Geox and Stonefly that were able to stabilise the district total output. From 1979 to 1996 the number of the footwear firms increased from 511 to 526 and the local

employment from 7,316 to 7,647 (Belussi, 2003). Geox in particular, by patenting a technological invention that allows the rubber sole to transpire, in just a few years has become number one in Italy and number seven in the world. Geox's extraordinary growth was due to the way it organised an external supplier network (mainly international) that adopted the "shoe that breathes" technology. Moreover, the main manufacturers in the district acquired the right to use the patent (Coro' & Grandinetti, 2001).

In the mid 1990s the district was already open to international markets: 70-80% of the production of ski-boots was exported. At the end of the 1990s by taking into account all the diversified range of products , half of its total production was exported to EU countries (such as Germany, France, Spain and the UK), to the US and to Japan. Many of the large companies opened commercial offices abroad (Aage, 2002). After the 1989 with the fall of the Berlin Wall, the East European countries provided an unique opportunity to develop international supply chains, based on simple stage of production such as assembling. As the result between 1979 and 2000 the number of shoe producers declined from 511 to 304 (Osem Report, 2001).

In the meantime, MNCs began to assert themselves in the district - in 1989 the Benetton Group entered through the acquisition of Nordica, one of the largest leading local firms[20]. Since acquiring Nordica, Benetton has concentrated the production and above all the planning in its Playlife clothing line in Montebelluna. Overall the impact of the globalisation process has not been dramatic so far - local employment

[20] In 2003 Nordica was then sold to Tecnica, which has now become the biggest firm in the district for the production of sport winter items.

showed only a relative small decline from 9,830 workers in 1997 to 8,782 in 2001 (Osem Report, 2001). The district is still rich in manufacturing activities, specialised suppliers and related industries and has not become an "hollow system", which only governs external, delocalised production activities. The process of district restructuring has not ended up with long term unemployment, but has enriched the district with the necessary market labour flexibility (Belussi, 2003).

6.5.3 Northampton: Overview

The East Midlands is the strongest region in Britain for footwear manufacture. Certain towns such as Northampton and Kettering that are both situated in Northamptonshire have depended on footwear production for their economic livelihoods, although the decline of UK manufacturing is altering their local economies dramatically.

Figure 6.11: Northampton

The county of Northamptonshire has become synonymous with the manufacture of high quality Goodyear welted footwear[1] and nearly all

21 Goodyear welted footwear acquires its name from the long strip of material called a "welt" which is sewn to the upper and insole of the shoe. The outsole - generally referred to as simply the sole - is attached separately to the welt. This extra part of

the British factories that use this process are based in Northamptonshire. Goodyear welted footwear is manufactured by a process invented over three hundred years ago. In modern times, British Goodyear footwear claims to be of a superior construction, often involving two hundred processes or more and sometimes taking eight weeks to complete. The versatility of this method has also enabled the industry to respond to the ever changing tides of fashion as well as export demand for the crafted quality British footwear which accounts about 40% of UK manufacturers sales (BFA, 2003).

Northampton is a large town in England with a population of over 190,000 people having received a large expansion in the 1970s and 1980s as part of the London overspill policy (Northampton Borough Council, 2003). Shoemaking has been an important industry in town for nearly 500 years and the town is also home to several high-tech engineering firms particularly related to the motor-sports industry. University College Northampton is also rapidly growing in reputation and contributing to the current expansion of the town.

Northampton, despite its recent shoe-making decline, is still one of the most important footwear districts in the UK as well as being home of some leading footwear brand and most competitive "made to order" firms. As it will be discussed in the next section, the district has a long tradition since the early nineteenth century. In this sense the birth of the district could be traced back to large extent to particular domestic demand conditions but also to some location factors such as the

---

the construction gives Goodyear welted shoes several advantages over other methods of construction.

presence of plentiful of water that initially boosted the emergence of the tanning industry (DTI Report, 2001).

Northampton today remains a major player in the textile and leather craft industry. It has also firmly established its status as a centre of distribution thanks to its location. As it was for Montebelluna, Northampton also displays the existence of a critical mass of spatially concentrated and sectoral specialised firms: approximately 200 companies with a total of 9,100 employees work in the footwear sector, with an average of 46 employees for firm. The district produces 80% of national overall production of welted footwear (BFA, 2003). Whereas in the district only large firms and MNCs are involved in the delocalisation of the production on a global scale, the majority of production within the district encompasses only one vertical stage (Porter & Van der Linde, 2004).

The competitiveness of the district is well-known – Northampton is considered nationally significant since it produces 8% of the whole world production of footwear, while it produces the 80% of the world production for welted footwear (Porter & Van der Linde, 2004). As for its national importance, Northampton is considered to be dominant since it accounted for 41% of UK employment in footwear in 1998 (DTI Report, 2001). Its share of local economy is however far more modest and can be considered insignificant since the district accounts only for 0.6% of East Midlands employment in 1998.

Despite this, the district is characterised by the presence of specific infrastructures such as research support that is available through two well established private institutions, namely SATRA and BLC Leather

Technology Ltd (DTI Report, 2001), it has displayed a fair decline by displaying a recession of -7.2% in terms of annual employment per annum from 1991 to 1998 (DTI Report, 2001), where footwear production, import and export have been steadily increasing from 1980 to 2002 (Table 6.6)[22].

Table 6.6: Northampton Production, Import, Export							
Northampton	1980	1985	1990	1999	2000	2001	2002
Production	20.6	17.8	18.73	21	11.83	11.33	9.2
Import	15.8	21.63	16.9	96.7	93.3	114	105
Export	4	3.16	2.86	12.8	12.33	10.66	8.5

(Source: BFA, 2002 – 1,000 pairs)

The reason behind this decline of competitiveness has been the loosening of those linkages that have traditionally created district strength (Porter & Van der Linde, 2004). In particular there are few linkages with specialised suppliers such as the small leather tanning industry and the district has recently lost its last machinery producer (DTI Report, 2001). A few links with related industries such as clothing and wholesaling are still existent but their economic importance is very limited.

Overall the international competitiveness of the industrial district seems to be supported by its evolution. Northampton displays a varied productive fabric made of few MNCs and foreign firms (e.g. Church & Co.) some local large firms (such as Dr. Martens, Grenson, Barker and Tricker's), small firms either working as suppliers, independent manufacturers for the low range market (the big majority) as well as subcontractors (BFA, 2003). A closer look at the

[22] Unfortunately, data for the value of production, import and export were not available. To this end, data based on number of pairs of shoes could be used as a proxy for international competitiveness.

historical evolution of the industrial district will be provided in the next section.

Table 6.7: Northampton key indicators

	Evaluation	**Comments, Explanation**
Location	East Midlands, UK	
Geographical span	Town	
Critical mass of firms	200	In 1998
Employment	9,100	In 1998, -36% from 1991
Main sector	Footwear	
Number of vertical stages	1 Stage	
Competitiveness	Nationally significant	< 10% footwear 80% welted footwear
National share of production	Dominant	Accounted for 41% of UK employment in footwear in 1998
Share of local economy	Insignificant	0.6% of East Midlands employment in 1998
Annual growth	Fair decline (< - 10% p.a.)	-7.2% annual employment recession from 1991 to 1998
Specific infastructure	Highly specific infrastructure	Research support is available through two institutions
Specialised Suppliers	Weak – disadvantage	Small leather tanning industries No machinery producers
Competitive related industries	Few links - neutral	Some links to local clothing and wholesaling

Several local institutions are based in Northampton. The British Footwear Association that is the representative body of UK suppliers of footwear and provides advice on industrial relations and arbitration of industrial disputes. At national level, through the Footwear Liaison Action Group (FLAG), a partnership of the British Footwear Association with intermediaries of the footwear industry as well as representatives of leading footwear companies and supply trades, BFA has drawn a strategic action plan for the industry that prioritises actions to help footwear firms. The plan prioritises activities under the following main headings – competitiveness, education and training, marketing, exports and sustainability. FLAG also encourages UK manufacturers to collaborate and share knowledge in order to survive and prosper. To this end, FLAG helps firms to network but also to maintain contacts with government departments, the Small Business Service, government offices, Business Links and Regional Development Agencies in the regions, devolved governments, Learning and Skill Councils and other business support organisations including trade associations and other representative bodies, research associations, higher educational establishments and trade unions.

There are two technology centres: SATRA and BLC Leather Technology Ltd. The latter is an independent leather technology centre that provides that has been based in Northampton for over 80 years. By subscribing a membership, companies can benefit from several services: from discounted leather and product testing and analytical services for routine testing against specifications, regular programmes of technical and retail training courses held at BLC or on-site at customers premises as well as access to the results of BLC's extensive research programme and communication of data through regular reporting.

As shown below in Table 6.8, in Northampton as it was for Montebelluna the "minimal requirements" identified in Chapter III section 3.2.5 - geographical concentration, sectoral specialisation and the presence of business networks – are definitely satisfied.

Table 6.8: Northampton "minimal requirements"

Geographical concentration	Geographical span: town
Sectoral specialisation	Approximately 200 companies with a total of 9,100 employees work in the footwear sector.
Business networks	Subcontracting Weak linkages with the tanning industry Few linkages with competitive related industry

A more thorough assessment of the network structure of the district will be provided in Chapter VII, when analysing its horizontal, forward and backward linkages as well as linkages with other organisations. This will allow us to assess how these linkages cope with endogenous and exogenous change therefore by supporting/hindering the district's competitiveness to face the "globalisation challenge". In particular, the level of embeddedness of the network structure of the district will be empirically assessed to shed the light on the possible existence of socio-economic networks (if any, as in the case of industrial district type II) as well as the presence of the distinctive coordination mechanisms that are conventionally associated with them.

6.5.4 Northampton: Historical developments

The shoe making companies that thrive in Northamptonshire today still continue the tradition of making quality men's footwear, for which the area has been long famous. The reason behind why the emphasis has always been on men's footwear is not easy to determine. As in any industrial district that has developed a major industry, there will be some factors which obviously contributes to its specialism, but also a certain "snowball effect", i.e. reputation once gained tends to perpetuate itself. In Northampton's case there was clearly a combination of both these mechanisms.

In common with several towns, Northampton developed a successful shoemaking trade during the medieval period. It was not until 1200 that it started, when "cordwainers" as they were originally called, united into a craft guild to create the foundations of the modern footwear industry as it is today. Shoe-making production was supported by a local tanning industry, which relied on the ample natural resources of the area – bark from the woodlands, water from the river Nene and hides from the cattle that grazed by it. Over time, Northampton has progressively claimed a position of prominence in shoe making, evolving as it has from rooted origins in the leather and tannery trades.

However, the single event that may have determined Northampton's reputation as a shoe town and particularly for men's footwear came later. In 1642, Olive Cromwell placed and order with local shoemakers, led by Thomas Pendleton, for 4,600 boots for his army campaigning in Ireland. He probably would not have to come to the town unless it

already had a sizeable pool of skilled shoemakers, but once he had done so, Northampton reputation spread far and wide and business expanded accordingly. By 1725, when Daniel Defoe wrote 'The Complete English Tradesman', he described the dress of the Englishman and said of their shoes that they were *'from Northampton for all, the poorest countryman and the master'* (Production Book, Alpha).

The succeeding centuries of empire-building and military conflicts ensured a good supply for shoemakers that were based in Northampton to the extent that has been sometimes said that its fortune have been built on war. There certainly seems to have been little need to include women's shoes in the product range of the eighteenth and nineteenth centuries. In any case this required slightly different skills ad was probably left to towns with a better knowledge of changing fashions such as London, York and Bristol.

The introduction of the "Goodyear Welting Machine" by Charles Goodyear in 1872 revolutionised the production of footwear. As advancement from the earlier "Black Sewer" and the "McKay sewing machine", both developed in the U.S., the Goodyear welting machine patented in the UK in 1871 mechanised the attachment of the upper, lining and insole to a "welt", by means of chain stitch, and the outsole by means of a lock-stitch (material provided by the Shoe Collection, Northampton Museums and Art Gallery).

Later, in the nineteenth century, machinery was developed to help the shoemaker and the modern versions of those machines are still used today. There were up to 200 highly skilled stages in the making of a

pair of Goodyear welted shoes and the craftsmen take many years to learn their skills. With the coming of the industrialisation to Northampton and the success of great entrepreneurs like Manfield and Barratt, boots and shoes for women were produced in greater numbers and were as important for business as was men's footwear. However, the traditionalists of Northampton believed that women's shoemaking – which by the twentieth century involved fewer skilled operations than men's footwear – was demeaning to the old-established trade of the town. For this reason, such production developed in Leicester and Norwich instead (Production Book, Alpha).

Shoemakers worked individually, collecting raw material from a manufacturer and then returning the finished product in return for payment. The work was carried out by hand, usually in a workshop in the shoemakers' own home. Other family members, including wives and children, were often engaged in assisting the shoemaker. Therefore, shoemakers enjoyed a largely autonomous, independent position. They decided themselves what days and hours they worked, often deciding to work on Sundays in order to have more cash to spend in the pub on Sunday night. The habit of taking off Monday, St Monday, is testimony to the freedom enjoyed. As shoemakers effectively ran their own business, they had to keep business records and conform to measurements to ensure shoes fitted correctly. This high level of literacy combined with the fact that many had been granted freeman status meant that any perceived infringement on their autonomy and flexibility would be vigorously opposed (material provided by the Shoe Collection, Northampton Museums and Art Gallery).

In 1857, when the first machines for shoe production appeared in Northampton, the town's shoemakers feared that there would be massive unemployment and that those who managed to keep their job would be forced to work in a factory. The idea of having their working lives controlled by someone else and having set working hours was totally alien to their way of thinking. A battle was inevitable between Northampton's shoemakers and shoe manufacturers.

In February 1859, the manufacturers of Northampton issued a statement confirming the shoemakers worst fears: machines to close shoe uppers were to be introduced *'that in consequence of sewing machines being extensively used in the cities and principal towns in the United Kingdom, so as seriously to affect the demand upon the wholesale houses any further delay in the introduction of them, by the manufacturers of Northampton, would be permanently injurious to the interest of the trade generally. And in accordance with this conviction, it was decided to introduce the machine sewn tops simultaneously into their respective trades'* (material provided by the Shoe Collection, Northampton Museums and Art Gallery).

The reaction of the Mutual Protection Society was to call a strike, urging as many shoemakers as possible to leave Northampton and seek work elsewhere. However the strike was unsuccessful and failed to rouse the town's shoemakers. It transpired that the Northampton shoemakers did not have any objection to the introduction of machines so long as they did not threaten their jobs. By the middle of May 1859, it was all over and sewing machinery had a permanent role to play in the production of Northampton's shoes. Just as business was returning as normal for Northampton's shoemakers, further changes were in

store. In Northampton's Campbell Square, the construction of Isaac, Campbell and Co's factory was completed in 1859. The company intended all of the shoemakers it employed to work inside the factory instead of at home – as was the norm. In order to convince the stubborn shoemakers, the company published an appeal. This appeal included "appeasements" designed to entice the shoemakers, as well as the very strictures which they wanted to avoid at all costs. Women were to have separate workshops with female superintendents while married women could continue working from home. Children could be apprenticed and the shoemakers could appoint their own overseers. However, the fixed wages and hours represented an end to the workers' autonomy. The Isaac Campbell and Co's factory failed, but others were to replace it. In 1861 the Turner Brothers took over, four years later they were producing 100,000 pairs of shoes a week using steam engines: the factory had arrived (material provided by the Shoe Collection, Northampton Museums and Art Gallery).

The more substantial industrialisation of the sector – the establishment of large firms and factories, and the shift to machines – began in the middle of the nineteenth century, with entrepreneurs like Moses Manfield leading the way. As transport links sprang up and a distribution network developed, the manufacturers in Northampton's shoe industry spied an opportunity for profit. Mechanisation was a means of maximising production and therefore profits. The nature of the Northampton shoe industry meant that this modernisation was perceived as a threat to the shoemakers' autonomy and independence and even threatened their livelihood. Their reaction was in the same spirit as the Luddites, though no physical damage was wrought upon the machinery, their introduction was fiercely opposed. When it

emerged the jobs were not immediately being lost through the introduction of machinery, their adaptation became widespread.

Soon Northampton's factory-made footwear was being worn all over the Empire and the trade provided employment for a substantial proportion of the working population of the area. As before, Northampton thrived on the demands of war. Of the seventy million pairs of footwear produced for the forces of Britain and her allies in the First World War over two-thirds were made in Northampton and its county (Production Book, Alpha). From the 1920s to the 1970s the production of military boots involved many different district firms with small firms mainly working as suppliers and subcontractors. Along with military boots, the successful production of fine men shoes gave the district a competitive edge. In the meantime the majority of small and medium size firms started their own independent production in the lower segments of the market (BFA, 2003).

In the 1970s when the footwear sector in Britain faced a major crises due to increasing import penetration (from Spain, Portugal, the former Yugoslavia, Taiwan, South Korea and others), the local industry undertook major restructuring. As the Leicester-based British Shoe Corporation in the 1980s took over the fashion market and brought in cheap imports, so most of Northampton's lower quality shoemaking firms had to be closed. The ones that survived have done so because of their high specialisation in fine quality men's footwear and success in marketing this traditional product in the luxury good market. Church & Co, Grenson and Barker for instance are amongst the oldest large companies that have been particularly successful when undertaking this strategy. Church & Co was in 1999 acquired by the Prada group.

As the result of the cost constraints imposed by the recession, large firms operating in both the high and low segments of the market were forced to select their subcontractors very strictly and in some cases initiate a process of vertical integration of the production cycle. Consequently, the gap between large firms and small firms widened. The former continued their growth, absorbing the most qualified human resources from the local labour market. In contrast the latter not only suffered a dramatic contraction of orders, but experienced a gradual deterioration of external economies which in the past had supplied them with the resources that were vital to their development (BFA, 2003).

In more recent years, the locality has also moved away from its traditional sectoral base. Employment in Northamptonshire has increased by more than 100,000 between 1982 and 2000, representing growth of more than 45 per cent for this period. The majority of this employment growth came from financial and business services, accounting for 29,000 of these jobs, and the wholesale/retail sector with hotels and restaurants accounting for a further 27,000. An additional 6,000 jobs came from transport and communications. Within manufacturing, metals, minerals and chemicals, these industries saw a loss of 3,000 jobs during this period but this was counterbalanced by an increase of 3,000 jobs in engineering (Northampton Borough Council, 2003)[23]. Despite moving away from its more traditional industrial base, Northamptonshire has experienced an influx of new firms in expanding sectors such as transport and communications (and particularly telecommunications) and financial services. This new

[23] Unfortunately, data on these different sectors were only available for the region and not for the specific locality under investigation.

industrial mix is expected to keep the economic climate within the county buoyant over the period to 2010. Employment prospects reflect this pattern, with average annual growth rates in the more traditional industries in decline and those of the expanding industries on the increase (Northampton Borough Council, 2003).

6.6 Differences in the industrial structure of the two districts

In order to understand the distinctive way in which industrial districts are responding to globalisation and their evolutionary dynamics, the different experiences of Montebelluna and Northampton are significant under several profiles.

Firstly, by looking at the spatial dimension of globalisation the districts seem to have followed very similar patterns of origin but very different patterns of evolution. The birth of both districts can be traced back to a large extent to particular domestic demand conditions but also to some location factors such as the presence of a plentiful supply of water that supported the emergence of the tanning industries. In this sense, the birth of both districts recall "local production systems" introduced by Garofoli's taxonomy (1983) discussed in Chapter 3 section 3.2, according to which local production systems are often nested in historical traditions and their development model is "extensive" (through a significant rise of national employment) and "endogenous" (led by local agents).

As for the districts' evolution where Montebelluna has sustained its competitiveness over time through diversification and imitative innovation, Northampton has deepened its specialisation by reducing

its product range. The findings support the literature according to which the different evolution of the two districts can be attributed mainly to external inducements derived from technology and technological change (Guerrieri & Pietrobelli, 2001) as well as sectoral trends that have been endorsed by different endogenous responses.

In Montebelluna, from the early origins of the district until today the district has mainly developed through imitative innovation and by undertaking several major diversifications. The continuous product diversification – a peculiar feature of the Montebelluna's district – has deeply affected the physiognomy of this district. In line with several studies that were discussed in Chapter III section 3.3, from the comparative study, it emerges that the introduction of innovations that have determined the evolution of the district calls for the presence of pioneer leading firms (Lazerson & Lorenzoni, 1999). These firms, such as the local firm Nordica, have developed a higher strategic ability to respond to changes in their competitive environment. In this sense, Nordica was able to recognise the value of a new technology, absorb the external knowledge and improve it, replacing the previous process with a new one.

In this sense, the early developments of the industrial structure of Montebelluna recalls the "hub-and-spoke" industrial district identified by Markusen (1996). In Chapter III we have seen that it occurs where one firm act as hub to the local economy, with suppliers and related activities spread around them like spokes of a wheel. The large hub-firm, as in the case of Nordica, has often links to suppliers, competitors and customers outside the district. These linkages act as conduits for innovation and creativity and therefore enable the transfer

of new ideas and technology to the host region. In this scenario, the presence of a large hub-firm with several activities and engaged in extra-district networks led Montebelluna to explore opportunities into new sectors, and diversify its production from the traditional specialisation.

Conversely, the evolution of Northampton seemed to be less dynamic as it was maintained by its historical path dependence that has locked the district into a certain pattern of specialisation. In this sense, the evolution of Northampton recalls the traditional industrial district in its Marshallian connotation (Lazerson & Lorenzoni, 1999). The shoe making companies that thrive in Northampton today still continue the tradition of making quality men's footwear, for which the area has been famous since medieval times. Northampton heavily relies on the production of Goodyear welted footwear that is manufactured by a process invented over three hundred years ago. In modern times, this highly craft-oriented footwear claims to be of a superior construction, often involving two hundred processes or more and sometimes taking up to eight weeks to complete. If on the one hand, the versatility of this method has enabled the industry to respond to export demand for the crafted quality footwear; on the other hand the deepening of specialisation has not only widened the gap between large and small firms but has left no room for significant innovation.

Second, by looking at the political dimension of globalisation the two industrial districts have been driven by two different forms of governance. In Montebelluna for instance, by assessing its historical evolution it emerges that not only were the most dynamic leading firms able to promptly take advantage of the new technologies and

face the complexity, but in a short time, the innovation cycle spread through the district networks thanks to imitation of the main local firms that followed the pioneer leading firms and the conversion of a number of small firms into new specialised activities. In this sense, in the district the diffusion of new knowledge and innovation that has been triggered have been far from an elitist process, as the diffusion has spread evenly across the district. Furthermore the governance of the district has not relied on a few "technological gate-keepers" that were able to absorb external knowledge but on large leading-firms (either local or foreign, independent firms or MNCs) which were able to provide critical knowledge and also small specialised supplier firms that undertook independent paths of internationalisation. In this sense, the competitiveness of the industrial district has been sustained over time by multiple extra-district networks.

Conversely, Northampton over the years has placed increasing emphasis on its traditional production. No radical innovation has been introduced and increasingly the district has deepened its specialisation. This has further exacerbated the division between the more specialised, larger and oldest firms that were able to survive and target specific market niches such the luxury goods market and many other local firms that either had to compete over lower segments of the market or were actually forced out of the market. In this sense a more elitist form of governance took place in Northampton (as opposed to a more democratic one as in Montebelluna where the majority of the district firms has benefited from the process of globalisation). The governance of Northampton has been also driven by large leading firms at the expense of small local firms. In this

sense, the competitiveness of the district relies on fewer extra-district networks where only large firms are involved.

Third, concerning the socio-cultural dimension of globalisation, the importance of geographical proximity and relationships that transcend geographical distance play a different role in the two districts under investigation. In particular the presence of multiple extra-district networks in Montebelluna starkly contrasts with the few linkages displayed by Northampton where only large firms are engaged in extra-district networks. This issue will be more thoroughly discussed in Chapter VIII in light of the empirical evidence provided in Chapter VII. Looking at the network structures of the two districts and analysing their horizontal, forward and backward linkages as well as their linkages with other organisations, allows us to assess how these linkages support/hinder the districts' competitiveness to face the "globalisation challenge". In particular, the level of embeddedness of the network structure of the district will be empirically assessed to shed light on the possible existence of socio-economic networks (if any, as in the case of industrial district type II) as well as the presence of the distinctive coordination mechanisms that are conventionally associated with them. This issue will be therefore addressed in Chapter VIII when discussing its broader implications for industrial districts in view of the empirical evidence presented.

Fourth, in relation to the economic dimension of globalisation, the districts under investigation not only provide different strategies to sectoral trends but they also display different attitudes toward innovation and different degrees of engagement with MNCs and

foreign firms. As a consequence, the districts benefit in different ways from their related spillover effects.

In terms of sectoral trends, by following different patterns of industrial development, both industrial districts have undertaken very different strategies by establishing themselves in very different niches of the market. This market positioning is particularly significant as the niches themselves embody different opportunities for both market consolidation and market expansion. In terms of price range, in Montebelluna the majority of firms produce shoes for the medium/high segment while a small minority for the high segment of the market (Osem Report, 2001). In Northampton, the firms tend to target the other two extremes of the range, namely high and low segments (DTI Report, 2001). This has important implications given that, as it has been pointed out in relation to global trends, the segment for medium-quality products is being replaced more and more by low and high quality products and overall, the footwear market sees a significant widening of its higher and lower ranges with a consequential restriction of its medium ranges. In terms of style, Montebelluna's main products are sport and casual shoes (Osem Report, 2001) while Northampton relies mostly on the production of formal shoes (DTI Report, 2001). This again has important implications given that formal and sport shoes are gradually being replaced by casual footwear. A more comprehensive discussion of these implications will be provided in Chapter VIII, section 8.2.2 when dealing with the broader implications of sectoral trends.

In addition, the different strategies implemented to respond to sectoral trends have also been coupled by different outsourcing strategies on

the basis of which Montebelluna appears to be "a node in global networks" (Amin & Thrift, 1992) while Northampton's participation in the global production chain is limited to a few large companies. In this sense, the decentralisation of low value added activities to foreign subcontractors can be interpreted as a form of functional upgrading where lower value activities are externalised, while high valued added stages are retained inside the district. In particular, in relation to the production of shoes with a low technological content, outsourcing involves final assembling more than the production of intermediate goods. By maintaining the bulk of intermediate processing at home while decentralising a larger number of assembling operations the district can reduce production costs on assembling operations while maintaining high quality standards on intermediate inputs (Amighini & Rabellotti, 2003).

In this context, the experience of Montebelluna closely resemble Vernon's later interpretation according to which labour intensive and low value stages of the production process are outsourced, whilst the high value and capital intensive are still kept in the country of origin.
In contrast, the technological evolution of Northampton seems to support Vernon's earlier model with large firms, mainly operating in the low segments of the market, outsourcing production to developing countries. The same outsourcing strategies implemented by the two districts are underpinned by two extremely divergent attitudes toward technological innovation. Whereas in Montebelluna, entrepreneurs seemed very eager to keep up with technological innovation by the timely adoption of new materials and by diversifying their products to match an increasingly volatile demand, Northampton has historically displayed a more resistant attitude toward almost every form of

innovation. This different attitude is still visible today in the way in which both districts try to portray themselves in relation to the market. While Montebelluna is successfully trying to establish itself as a highly dynamic "sport-system district" and as a shoe manufacturing centre of world importance, Northampton is trying to survive by placing emphasis on its traditional craft legacy - the creation of a Welted Seal is a tangible proof of this attempt.

The different level of engagement displayed by the two districts in relation to the global production chain has also profound implications for district firms' exposure to MNCs, foreign firms and the spillover effects that are traditionally associated with them. In Montebelluna, both foreign and domestic firms are exploring the new frontiers of the global economy and their international experience is beneficial for the district as a whole. The presence of local leading firms and the investments made in the district by MNCs has not disrupted the pre-existing industrial structure but actually has enhanced it by providing valuable extra-district networks. In this sense the findings in Montebelluna support Birkinshaw's contention that in mature industries, foreign ownership is mostly positive for local firms.

In contrast, in Northampton the more recent acquisition of Church & Co. footwear by the Prada Group does not seem to have brought any substantial benefit to the district – high quality footwear is entirely produced in-house and besides the Prada Group - *nobody else seems to have benefited from its participation in the global luxury sector* (interview with one the key informant). In this sense, the findings in Northampton support Birkinshaw's contention that clusters displaying low dynamism but operating in a mature industry receive foreign

investment with some ambivalence. In the case under investigation for instance, the findings suggest that the district does not benefit from the presence of foreign investment because the linkages between the foreign firm and local firms do not involve any technology transfer or access to investing company's global presence.

In order to provide additional insights on the viability of both Montebelluna and Northampton, Chapter VII will be devoted to assess how backward, forward, horizontal linkages as well as linkages with other organisations promote/hinder industrial districts to face the "globalisation challenge". In particular, the level of embeddedness of their network structure will be empirically assessed in the attempt to shed light on the possible existence of socio-economic networks (if any, as in the case of industrial district type II) as well as the presence of the distinctive coordination mechanisms that are conventionally associated with them.

6.7 Conclusions

The focus of this chapter is industrial adjustment to globalisation. The chapter concentrates upon one particular sector, footwear, which bears the characteristics of a typical low-skill intensive manufacturing sector where comparative advantage has decisively shifted to low-wage labour countries. The chapter discusses the conditions under which a relatively traditional sector of the industry such as footwear can still survive and prosper in spite of global competition. By adopting a value chain perspective, we have seen how the primary economic rents in the chain of production are increasingly to be found in areas outside the production. In the specific case of footwear for instance, the prime source of economic rent in the past was constituted by raw materials

and assembly, while today, design, buying and retailing appear to be amongst the most profitable links of the chain. Similarly, within this scenario characterised by an increasing proportion of output outsourced to developing countries, branding is of growing importance as a guarantee of a level of quality associated with the brand name.

As for the recent trends in the global market, the sector is facing a crisis of global proportions. Along with global competition, the sector is also affected by dynamic volatility and by a progressive segmentation of the market (Pambianco, 2000). Not only are dynamic fashion trends causing styles to change on weekly basis, but the footwear sector has also become a "niche-market" both in terms of price and style. This clearly represents a threat as well as an opportunity for the footwear industry worldwide and to a larger extent for industrial districts and their small firms. Given that the responsiveness of the European market, and since competing with low-wage countries like China is hardly possible and the sector is still a relatively high protected industry, those countries that have succeeded in exploiting their comparative advantage in relation to quality, design and branding remain strongly competitive on the international market. This leads us to conclude that although the possibility of a sector adjustment by producing different and higher quality product has not been contemplated by the HOS model of international trade, it seems to be the only way forward.

The different experiences of the Italian and British footwear sector well represent this phenomenon: in some countries such as Britain, increasing imports has played a very important role and domestic employment has declined sharply. Elsewhere in Italy for example, domestic output and employment have been maintained. In Italy,

increasing competitive pressure from emerging low-wage countries forced the domestic footwear sector to diversify its production by increasing its specialisation in high quality goods, which do not compete directly with low quality goods from emerging countries. On the contrary, Britain has heavily relied on protectionism in the past and only recently it has undertaken a similar pathway - a remarkable process of restructuring by increasingly employing skilled labour in the attempt to upgrade its production and to concentrate upon specialised products and design intensive activities.

The upgrading strategies undertaken by the two districts show how their governance was driven by different firms (both small and large sized firms in Montebelluna, mainly large firms in Northampton) and towards different outcomes: the "democratic globalisation" experienced by small firms in Montebelluna starkly contrasts with the "elitist globalisation" experienced by small firms in Northampton. Drawing on the diversity of these national experiences some policy implications will be discussed in Chapter VIII section 8.2.5 in light of the empirical evidence provided in Chapter VII.

CHAPTER VII THE EMPIRICAL EVIDENCE

7.1 Introduction

This chapter presents some of the results of the empirical investigation carried out in two footwear industrial districts: Montebelluna and Northampton. The areas analysed are two of the most important districts specialising in the footwear industry for Italy and Britain respectively. Montebelluna is a shoe manufacturing centre of world importance and the "sport-system district" is one of the most significant in North-Eastern Italy – an area that researchers and analysts from all over the world have studied in order to better understand the origins of the so-called "Veneto miracle". Northampton, despite its recent decline, is still one of the most important footwear districts in Britain as well as being home of some leading footwear brands.

As the present research addresses the broad theme of the viability of industrial districts in dealing with dramatic changes in their competitive environment, these two well-established industrial districts in Britain and Italy represent a fertile ground to address the issue of the role of industrial districts as an organisational strategy for small manufacturing firms to compete globally. We have seen how Montebelluna is consolidating its position as "sport-system district" and as a shoe manufacturing centre of world importance, the footwear district in Northampton is declining.

The upgrading strategies undertaken by the two districts show how their governance is driven by different firms (both small and large sized firms in Montebelluna, mainly large firms in Northampton) and

towards different outcomes: the "democratic globalisation" experienced by small firms in Montebelluna starkly contrasts with the "elitist globalisation" experienced by small firms in Northampton.

In Montebelluna, the governance of the district has not relied on few "technological gate-keepers" that were able to absorb external knowledge; instead governance has relied on large leading-firms (either local or foreign, independent firms or MNCs) that were able to provide critical knowledge, as well as small specialised supplier firms that undertook independent paths of internationalisation. In this sense, the competitiveness of the industrial district has been sustained over time by multiple extra-district networks.

Conversely in Northampton, the companies that have survived have done so because of their high specialisation in fine quality men's footwear and their success in marketing this traditional product in the luxury goods market. However, only the oldest, larger companies were able to benefit from this strategy. As the result of the cost constraints imposed by increasing competition, large firms operating in both the high and low segments of the market were forced to select their subcontractors very strictly and in some cases initiate a process of vertical integration or outsourcing outside the district. Consequently, the gap between large firms and small firms widened. The former continued their growth, absorbing the most qualified human resources from the local labour market and often consolidating their international position. In contrast, the latter not only suffered a dramatic contraction of orders, but also experienced a gradual deterioration of external economies which in the past had supplied them with the resources that were vital to their development. In this sense, the

competitiveness of the industrial district has been hindered by the lack of multiple-district networks.

In order to provide additional insights on the network structures of Montebelluna and Northampton, this chapter will be devoted to assessing their network structures in terms of backward, forward and horizontal linkages as well as linkages with other organisations. Whereas Chapter VI sketched the "bones" of the two districts under investigation, this chapter will fill in the "flesh". More precisely, drawing on the data collected through the questionnaire and the semi-structured interviews and looking at the network structures of the two districts, analysing their horizontal, forward and backward linkages as well as their linkages with other organisations, will allow us to assess how these linkages support/hinder the districts' competitiveness to face the "globalisation challenge". In particular, the level of embeddedness of the network structure of the district will be empirically assessed to shed light on the possible existence of socio-economic networks (if any, as in the case of industrial district type II) as well as the presence of the distinctive coordination mechanisms that are conventionally associated with them.

7.2 The Fieldwork – Main findings

7.2.1 Montebelluna – Profile of the respondents

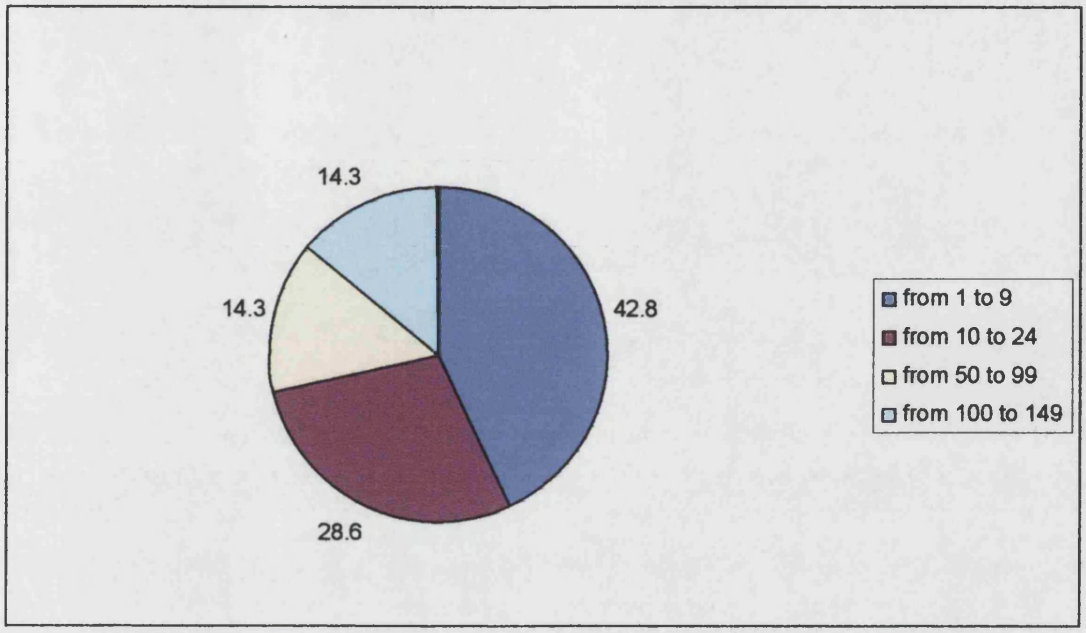
Before presenting a detailed picture of the linkages detected, drawing on the data collected through the questionnaire, some general characteristics of the respondents are sketched below:

a. In 71.4% (10 firms) of the cases, respondents were either company CEO/Directors or firm owners.
b. 57.1% (8 firms) of the respondents have been working in the firm for more than 10 years. 28.6% (4 firms) of the respondents have been working within the company for 6-9 years.

Both these figures indicate a sound level of trustworthiness of the respondents as being knowledgeable about all key aspects of the firm and being accountable for "first-hand" knowledge of the relational asset of the firm.

The sample is composed of 18 firms, but only 14 decided to take part in the study. The 14 firms are stratified by size: 6 firms are micro-firms (1-9 workers), 4 firms accounts for between 10 and less than 25 workers. The remaining 4 firms are medium firms (from 50 to 150 workers). Figure 7.1 provides a visual representation of the firms stratified by size. The firms are very well-established in Montebelluna: 85.7% of the firms (12 firms) were established more than 15 years ago, while the remaining 14.3% (2 firms) were established between 6 and 9 years ago.

Figure 7.1: Montebelluna, Respondents – Stratified by size



As for the type of companies: 85.7% of the firms (12 firms) are either independent or headquarter of national firms and the remaining 14.3% (2 firms) is made up of subsidiaries of other national firms. As for the type of ownership, 42.8% of the firms (6 firms) are corporations, while the remaining 57.1% (8 firms) is made in equal parts of partnerships and sole proprietorships. The respondents all work in local firms[24].

In relation to the main product, 57.1% of the respondents (8 firms) produce sport shoes, 28.6% (4 firms) casual shoes and 14.3% (2 firms) safety footwear. As for the technological level of the main product: 57.1% (8 firms) displays a high technological level, while 42.8% (6 firms) exhibits a medium technological level. Production is distributed according to the main market segment as follows: 85.7%

[24] Unfortunately, the foreign firms that were contacted did not want to participate in the study. The reasons for their refusal are listed in the Appendix.

of the respondents (12 firms) produce shoes for the medium/high range price segment and 14.3% (2 firms) for the high range price segment of the market.

7.2.2 Northampton – Profile of the respondents

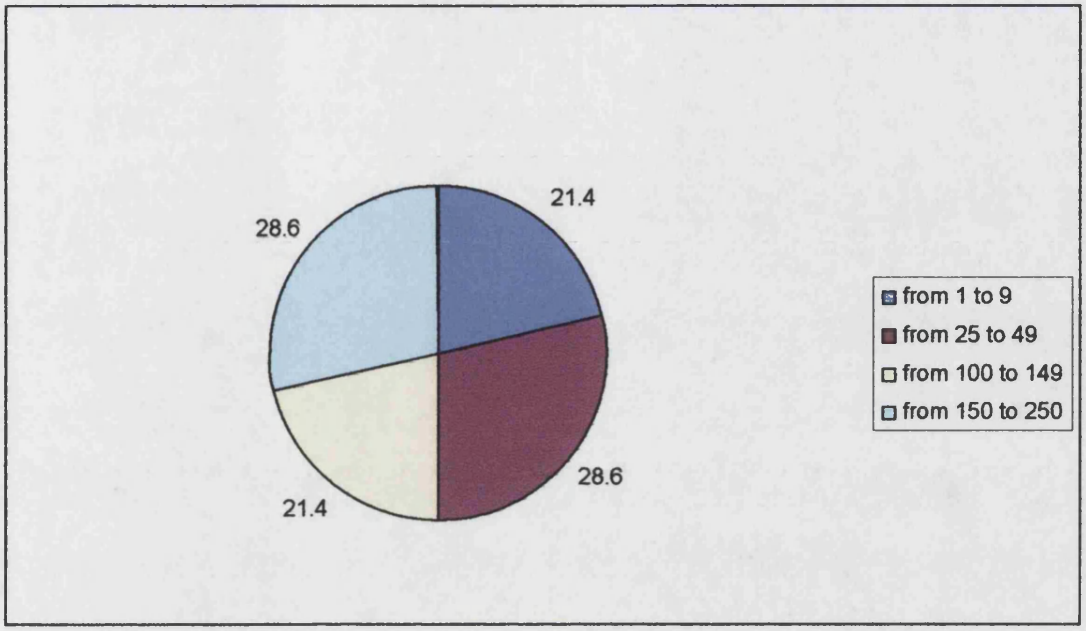
Before presenting a detailed picture of the linkages detected, some general characteristics of the respondents are given below:

a. In 71.4% of the cases (10 firms), respondents were firm owners while in 28.6% (4 firms) were firm owners or managing directors.
b. 71.4% of the respondents (10 firms) have been working in the firm for more than 15 years. 28.6% of the respondents (4 firms) have been working within the company for 6-9 years.

As in the case of Montebelluna, both these figures indicate a sound level of trustworthiness of the respondents as being knowledgeable about all key aspects of the firm and being accountable for "first-hand" knowledge of the firm's socio-economic networks.

The sample is composed of 18 small and medium size firms, but only 14 decided to take part in the study: 3 micro-firms (1-9 workers), there were no firms with between 10 and less than 25 workers, 4 small firms with between 25 and less than 50 workers and 3 medium firms (between 100 and 150 workers). The remaining 4 firms are larger firms (from 200 to 240 workers). The firms are very well-established in Northampton: 78.5% of the firms (11 firms) were established more than 15 years ago, while the remaining 21.4% (3 firms) were established between 3 and 5 years ago.

Figure 7.2: Northampton, Respondents – Stratified by size



As for the type of companies: 71.4% of the firms (10 firms) are either independent or headquarters of national firms or foreign firms and the remaining 28.6% (4 firms) is made up of subsidiaries of other national firms. As for the type of ownership, 57.1% of the firms (8 firms) are corporations, while the remaining 42.8% (6 firms) is made up of sole proprietorships. Regarding the ownership nationality, the respondents are 71.4% local firms (10 firms) and 28.6% foreign firms (4 firms). In relation to the main product, all the firms produce formal shoes. As for the technological level of the main product: half of them display a high technological level, while the other half exhibits a medium technological level. Production is distributed according to the main market segment as follows: 50% of the respondents produce shoes for the high range price segment (7 firms), 21.4% for the medium/high range price segment (3 firms) and 28.6% for the medium price segment of the market (4 firms).

7.2.3 Montebelluna - Backward linkages

Backward linkages mainly consist of the relationships with suppliers and subcontractors. Despite the fact that they all provide inputs, this section distinguishes between supplier and subcontractor because the former provides raw materials (mainly leather and plastic) or components (e.g. soles) while the latter is involved in a particular stage of the production process (e.g. upper-cutting).

A) Suppliers

Suppliers include tanneries, producers of components and accessories, suppliers of machineries and service firms.

As for the geographical distribution of the suppliers, in the questionnaire the respondents were asked to identify their three main suppliers (to be listed in order of importance) and to indicate for each one their geographical distance from the firm in miles (see Table 7.1):

Table 7.1: Geographical distance of suppliers in Montebelluna

Distance	Minimum	Maximum	Mean	N of cases
1st Supplier	3.125 miles	2500 miles	423.21	14
2nd Supplier	6.25 miles	281.25 miles	128.56	14
3rd Supplier	3.125 miles	156.25 miles	55.80	14
Mean (/3)			**202.52 miles**	

In this respect, firms tend to engage in relationships with fairly local suppliers with the exception of the most important supplier, often a supply of raw material such as leather or plastic. Tanneries in particular play a very central role in determining the degree of competitiveness of the footwear sector. They have developed a capability of differentiating their products on the basis of their

customer specific requests. The respondents were also asked about the length in years of their relationships with the three suppliers (see Table 7.2):

Table 7.2: Length of relationships with suppliers in Montebelluna

Length	Minimum	Maximum	Mean	N of cases
1st Supplier	9 years	34 years	17.86	14
2nd Supplier	4 years	29 years	14.29	14
3rd Supplier	4 years	32 years	14.29	14
Mean (/3)			**15.48 years**	

They were also prompted about the nature of the relationships with the three suppliers. They were asked to broadly identify their relationship among a choice of three options: a social relationship irrespective of any commercial/business relationship; a strictly commercial/business relationship; a social relationship as the result of any existing commercial/business relationship. Surprisingly the responses concerning the relationship nature was the same one for all the three suppliers, regardless of their importance: 85.7% of the respondents (12 firms) stated that they have 'a social relationship irrespective of any commercial/business relationship', while the remaining 14.3% (2 firms) stated that they have 'a social relationship as the result of any existing commercial/business relationship'. Interestingly, none of the interviewees stated that they have strictly commercial/business relationships with their suppliers.

As for the way in which firms cooperate with their main suppliers of leather and plastic, 85.7% of the firms (12 firms) stated that they cooperate 'a lot' (on a scale of 'a lot', 'a little' and 'never') in terms of exchange of information and experience while 71.4% cooperate 'a lot'

with suppliers of leather and plastic to improve quality (10 firms). 57.1% cooperate 'a lot' for negotiation of payment and delivery conditions and respect of delivery timing (8 firms). Table 8.3 presents the results.

Table 7.3: Cooperation with suppliers of leather and plastic in Montebelluna

	A lot	A little	Never
Exchange of information and experience	**85.7%**	**0**	**14.3%**
Negotiation of payment and delivery conditions	**57.1%**	**14.3%**	**28.6%**
Joint product development	**42.8%**	**42.8%**	**14.3%**
Improving quality	**71.4%**	**14.3%**	**14.3%**
Respect of delivery timing	**57.1%**	**0**	**42.8%**

As for the way in which firms cooperate with their main suppliers of soles 85.7% of the respondents (12 firms) stated that they cooperate 'a lot' to negotiate payments and delivery conditions, while 71.4% of the respondents (10 firms) cooperate 'a lot' in order to exchange information and experience, joint product development as well as improving quality. Only 42.8% of the respondents (6 firms) cooperate 'a lot' to respect delivery timing (see Table 7.4). Overall, in both cases – suppliers of materials and suppliers of components - the producer-suppliers relationship seems to be very tight, based on long term interaction and cooperation. This issue was further explored through the semi-structured interviews.

It clearly emerged from the interviews that both producers and suppliers believe that spatial proximity and the existence of a social long-term relationship (between 9 and 34 years) are crucial factors in

determining competitive advantage. When prompted to speak about his main supplier, one of the interviewees for instance stated:

> *'We have know each other since school, our children still go to the same school. He was the first person I started buying stuff from, he was my first supplier. I have never considered turning to a different supplier as I wouldn't get that "special treatment"* (Interview with Gamma, managing director).

Table 7.4: Cooperation with suppliers of soles in Montebelluna

	A lot	A little	Never
Exchange of information and experience	**71.4%**	**14.3%**	**14.3%**
Negotiation of payment and delivery conditions	**85.7%**	**0**	**14.3%**
Joint product development	**71.4%**	**0**	**28.6%**
Improving quality	**71.4%**	**0**	**28.6%**
Respect of delivery timing	**42.9%**	**19%**	**19%**

The majority of the firms interviewed also declared that when problems arise with suppliers they normally engage in joint problem solving activities. In most cases, according to the respondents this strategy works very effectively because of the long-lasting relationship that has often developed into friendship. As one of the interviewees described it:

> *If I get an order at the very last minute, I call him up because I know he will do his best to prioritise my order, even if he is very busy himself* (Interview with Theta, owner).

Furthermore from the interviews it emerges that where a problem occurs, for example the supplier of components does not supply the quality required or the main producers does not fulfil its obligations, the information immediately spreads throughout the district. One of interviewees described this process by stating:

> *if he can't provide what I asked him for, he knows that he cannot get away with it: by the end of the week all his other customers would now what he has done to me* (Interview with Gamma, managing director).

This mechanism of word of mouth therefore creates transparency and discourages district firms from undertaking any opportunistic behaviour. The consequence would be a loss of reputation for the firm that has broken the agreement and one of the extreme sanctions can be the marginalisation from the community. As the same interviewee put it:

> *Nobody around here would be willing to do any business with him. If you work and live in a small place you need to work hard in order to keep a high profile* (Interview with Gamma, managing director).

This informal system of business practices not only is widely accepted but it also boosts a very efficient and cooperative system of production that is flexible enough to satisfy a very diversified and volatile demand. One of the interviewees, for example when describing how he handles late orders by relying on a subcontractor stated:

It doesn't matter if it's late at night, I would be calling him at any time on his mobile and he knows that I wouldn't take a no for an answer – (Interview with Theta, owner).

In addition, information regarding products circulates widely, because suppliers of components are amongst the first actors to come across new products and it is common for them to suggest improvements to their other customers. Obviously, the component suppliers have their own interest in maintaining good relationships with their best customers and they will therefore avoid making exact copies of the same product for other firms. As one the interviewees put it:

Since I am developing this prototype for firm X, I can see exactly where they are heading to and this gives me hints on what could be fashionable or in demand in the next season...when I have to develop a prototype for a different customer, obviously that information is still fresh in my mind and can be of some use. Customer X doesn't care, as long as his shoes look better (laughs)..and a bit a different (Interview with Epsilon, owner).

According to some of those interviewed, the provision of information from component suppliers is crucial for smaller firms that do not have the capabilities to produce their original sample collection to survive. This process is described by one of the interviewees as follow:

I think many small firms come to me for this particular reason: they are in a way benefiting from R&D activities of the most innovative firms at no cost. They surely wouldn't have the money

to engage in extensive R&D themselves, but still they can take advantage from it (Interview with Epsilon, owner & designer).

B) Subcontractors.

In the sample of firms under investigation, it became clear from the questionnaire that Italian producers count on the existence of a wide network of small subcontracting firms specialised in one or two phases of the production cycle. Respondents tend to follow different outsourcing strategies: 85.7% (12 firms) outsource upper printing, 57.1% (8 firms) outsource both upper cutting and upper stitching. The stitching phase tends rather to be decentralised to subcontractors: 28.6% (4 firms) outsource hand-stitching as well as sole stitching. 28.6% (4 firms) of the respondents also tend to decentralise lasting and finishing, while only 14.3% (2 firms) outsource creative input and design (see Table 7.5).

Different reasons are given for decentralisation: the main reason for all the respondents is reduction of costs (85.7%, 12 firms), followed by the increase in flexibility (71.4%, 10 firms), the certitude of costs and the increase of specialisation (28.6%, 4 firms). By becoming more specialised, subcontracting firms are better able to exploit the different economies of scale that are associated with the different phases of production. As a result, they produce better products at lower costs, with shorter lead-times.

Overall the respondents follow a common pattern in their outsourcing strategy as they outsource those phases of production such as printing and stitching that are highly labour intensive but represent low-value

added activities, while they tend to keep in-house creative input and design, one of the most profitable links of the value chain.

Table 7.5: Outsourcing in Montebelluna

Phase of Production	%, Counts
Creative input	**14.3% 2 firms**
Design	**14.3% 2 firms**
Printing	**85.7% 12 firms**
Upper cutting	**57.1% 8 firms**
Upper stitching	**57.1% 8 firms**
Hand-stitching	**28.6% 4 firms**
Heel covering	**0**
Sole stitching	**28.6% 4 firms**
Lasting	**28.6% 4 firms**
Finishing	**28.6% 4 firms**

According to the respondents, cooperation with subcontractors is a crucial asset to achieve competitive advantage:

> *Trying to do things together is very important to us. Whereas they can see things from a different angle as they need to keep costs low, we have our own ideas on how things should be done. We could be discussing over specifications for hours before giving out any contract, but by the end of it, I'd like to think we are all happy* (Interview with Zeta, managing director).

From the questionnaire emerges that in relation to the way the firms cooperate with their subcontractors, 57.1% of the respondents (8 firms) stated that they cooperate 'a lot' (on a scale of 'a lot', 'a little' and 'never') in terms of exchange of information and experience as well as

engaging in joint quality controls, but they cooperate 'a little' on technological upgrading. 42.8% of the interviewed (6 firms) stated that they cooperate 'a lot' in setting of product specification as well as in the organisation of production (see Table 7.6).

Table 7.6: Cooperation with Subcontractors

Cooperation with Subcontractors	A lot	A little	Never
Exchange of information and experience	**57.1%**	**42.8%**	
Negotiation of payment and delivery conditions	**14.3%**	**85.7%**	
Technological upgrading	**42.8%**	**57.1%**	
Quality control	**57.1%**	**28.6%**	**14.3%**
Setting of product specifications	**42.8%**	**42.8%**	**14.3%**
Organisation of production	**42.8%**	**42.8%**	**14.3%**

As for the spatial proximity with sub-contractors, it emerged that nearly all respondents tend to decentralise mainly within the local area:

> *Besides the largest firms, most of us here like to outsource assembling locally. This is because of different reasons. Someone might disagree over this, but I don't think that either East Europe or China are still up to our quality standards. If you rather rely on someone local, you know them, every time you want to make sure that everything is going well and up to speed, you just pop there to see how they are doing* – (Interview with Delta, owner).

This allows them to engage in face-to-face relationships with subcontractors, maintaining stable and continuous linkages with them and to exert a strict control over their work. According to the

interviewees, this kind of interaction helps to solve most of their problems timely and effectively.

7.2.4 Northampton – Backward linkages

As it was for Montebelluna, backward linkages were considered in terms of relationships with suppliers (leather and plastic, components) and subcontractors.

A) Suppliers

Suppliers include tanneries, producers of components and accessories, suppliers of machineries and service firms. As for the geographical distribution of the suppliers, in the questionnaire the respondents were asked to identify their three main suppliers (to be listed in order of importance) and to indicate for each one their geographical distance from the firm in miles (see Table 7.7):

Table 7.7: Geographical distance of suppliers

Distance	Minimum	Maximum	Mean	N of cases
1st Supplier	320 miles	1000 miles	794.29	14
2nd Supplier	45 miles	90 miles	78.93	14
3rd Supplier	55 miles	1200 miles	436.07	14
Mean (/3)			**436.43 miles**	

It emerges that firms tend to engage in relationships with quite distant suppliers with the exception of the second supplier in order of importance, which is often a supplier of component such as soles. The respondents were also asked about the length in years of their relationships with the three suppliers. Table 7.8 displays the results:

Table 7.8: Length of relationships with suppliers

Length	Minimum	Maximum	Mean	N of cases
1st Supplier	4 years	16 years	8.93	14
2nd Supplier	2 years	5 years	3.43	14
3rd Supplier	4 years	5 years	4.29	14
Mean (/3)			**5.5 years**	

In this respect, from the questionnaire it emerges that the relationships with suppliers tend to be quite recent: 5 years and 6 months on average. They were also prompted about the nature of the relationships with the three suppliers. They were asked to broadly identify their relationship from a choice of three options: a social relationship irrespective of any commercial/business relationship; a strictly commercial/business relationship; a social relationship as the result of any existing commercial/business relationship.

With regards the relationship with the most important supplier, the responses indicated that 85.7% of the respondents (12 firms) stated that they have strictly 'a business relationship' while only the 14.3% (2 firms) stated that they had 'a social relationship irrespective of any commercial/business relationship'. Interestingly, none among the respondents stated that they have a social relationship as the result of any existing commercial/business relationship with their most important supplier. As for the way in which firms cooperate with their main suppliers of leather and plastic, firms tend to display different attitudes toward cooperation: while 50% of the firms (7 firms) stated that they cooperate 'a lot' (on a scale of 'a lot', 'a little' and 'never') in terms of exchange of information and experience as well as negotiation of payment and delivery conditions, improving quality and respect of

delivering timing, the remaining 50% stated that they never cooperate. Additionally 71.4% of the respondents (10 firms) stated that they never cooperate with suppliers of leather and plastic in terms of joint product development (see Table 7.9).

Table 7.9: Cooperation with suppliers of leather and plastic

	A lot	A little	Never
Exchange of information and experience	**50%**	**28.6%**	**21.4%**
Negotiation of payment and delivery conditions	**50%**	**0**	**50%**
Joint product development	**28.6%**	**0**	**71.4%**
Improving quality	**50%**	**0**	**50%**
Respect of delivery timing	**50%**	**0**	**50%**

Similarly, respondents display extremely different attitudes towards cooperation with their main suppliers of soles: while 50% (7 firms) stated that they cooperate 'a lot' to negotiate payments and delivery conditions as well as improving quality and in respect of delivering timing, the other half stated that they never cooperate. Additionally, 50% of the respondents (7 firms) stated that they never cooperate in terms of exchange of information and experience (see Table 7.10). Overall, in both cases – suppliers of materials and suppliers of components – it emerges that the producer-suppliers relationship seems to be quite loose, often involving a relatively recent relationship based on long distance and a low level of cooperation. This issue was further explored through some follow-up interviews where the interviewees were prompted with questions concerning their relationships with suppliers.

Table 7.10: Cooperation with suppliers of soles

	A lot	A little	Never
Exchange of information and experience	**28.6%**	**21.4%**	**50%**
Negotiation of payment and delivery conditions	**50%**	**0**	**50%**
Joint product development	**0**	**28.6%**	**71.4%**
Improving quality	**50%**	**0**	**50%**
Respect of delivery timing	**50%**	**0**	**50%**

From the interviews, it emerges clearly that neither producers nor suppliers believe that spatial proximity and the existence of a social long-term relationship are crucial factors in determining competitive advantage.

> *The fact that we have known each other for a long time doesn't mean much to me. He is still a customer as any other. He wouldn't feel entitled to ask any favour and I would never ask any favour to him...I mean life is tough and this is business!* (Interview with Iota, owner).

> *We bump into each other sometimes in the street... so what? Yes we know each other and we say "hello" but if I could get cheaper fabrics and materials from someone else, I definitely would go for it* (Interview with Gamma, owner).

The majority of the firms interviewed also declared that when problems arise with suppliers they normally rely on external advice especially from the British Footwear Association.

If he does not stick to what we have agreed, I will try to discuss things through with him first, trying to find an amicable solution, but if that doesn't happen I would go and have a word with E. from BFA: she knows everyone around here and she is always there to help Interview with Alpha, managing director).

Overall, according to one of the key informants:

Better supply management is needed for the district to meet its customer's delivery and quality needs. More precisely there is the need to increase competitiveness through quick response, flexibility, lower stockholding and greater fashionability (Interview with one of the key informants).

B) Subcontractors.

In the sample of firms under investigation, from the questionnaire data indicates that British producers count on the existence of a wide network of small subcontracting firms specialised in one or two phases of the production cycle.

Respondents tend to follow different outsourcing strategies: 57.1% (8 firms) outsource hand-stitching while 50% (7 firms) outsource both upper cutting and upper stitching. 28.6% of the respondents (4 firms) also tend to decentralise printing. Yet, different reasons are given for decentralisation: the main reason for all the respondents is reduction of costs, followed by the increase in flexibility, the certitude of costs and the increase of specialisation. By becoming more specialised, subcontracting firms are better able to exploit the different economies of scale that are associated with the different phases of production.

Overall from the questionnaire it emerges that, as in the case of Montebelluna, the firms follow a common pattern in their outsourcing strategy as they outsource those phases of production such as printing and stitching that are highly labour intensive but represent low-value added activities, while they tend to keep in-house creative input and design, one of the most profitable links of the value chain.

Table 7.11: Outsourcing

Phase of Production	**%**
Creative input	**0**
Design	**0**
Printing	**28.6**
Upper cutting	**50**
Upper stitching	**50**
Hand-stitching	**57.1**
Heel covering	**0**
Sole stitching	**0**
Lasting	**0**
Finishing	**0**

According to the respondents, cooperation with subcontractors is a crucial asset to achieve competitive advantage:

> *We give out hand-stitching since it's very time-consuming to be carried in house so we prefer giving that out. We have been relying on the same company for ages and they know exactly what we expect from them* (Interview with Gamma, owner).

If the cutting is done properly as they are used to do it, that saves us a lot of time when assembling. This is why, we take time to discuss the prototype thoroughly so they know exactly how we want it (Interview with Zeta, managing director).

As for the way in which firms cooperate with their subcontractors, 78.5% of the respondents (11 firms) stated that they cooperate 'a lot' (on a scale of 'a lot', 'a little' and 'never') in terms of joint quality controls as well as setting of product specifications. 57.1% of the respondents (8 firms) cooperate in relation to exchange of information and experience, but 50% (7 firms) stated that they never cooperate in the organisation of production (see Table 7.12).

Table 7.12: Cooperation with subcontractors

Cooperation with Subcontractors	A lot	A little	Never
Exchange of information and experience	**57.1%**	**21.4%**	**21.4%**
Negotiation of payment and delivery conditions	**50%**	**28.6%**	**21.4%**
Technological upgrading	**28.6%**	**21.4%**	**50%**
Quality control	**78.5%**	**0**	**21.4%**
Setting of product specifications	**78.5%**	**0**	**21.4%**
Organisation of production	**21.4%**	**28.6%**	**50%**

This issue was further explored through the semi-structured interviews where the interviewees were prompted with questions concerning their relationships with sub-contractors. As for the spatial proximity with sub-contractors from the interviews it emerged that nearly all respondents tend to decentralise mainly within the local area. This allows them to engage in face-to-face relationships with subcontractors, maintaining

stable and continuous linkages with them and to exert a strict control over their work. As in the case of Montebelluna, the interviewees claim that this kind of interaction helps to solve most of their problems timely and effectively:

> *This doesn't happen very often, but sometimes we like to make changes. We call them up and if they can, they always try to please us. When S. goes there, they show him what they are doing, they discuss possible solutions to our problem and then we "negotiate" a new deal. Like in any other relationship we had our highs and lows, but overall our business relationship seems quite solid* (Interview with Delta, owner).

Or as someone else stated:

> *If something goes wrong, like when we detect faulty uppers we let them know immediately. They often come over, they are just around the corner...to see where is the problem and how it can be sorted out* (Interview with Lamda, owner).

From the interviews with key informants, it also emerges that a few manufacturers operating in the low segment of the market have recently started to outsource some stages of the production abroad:

> *You see the cluster has been reacting quite passively towards the increasing competition from emerging countries such as China or the Far East. In general, they seem more concerned about the worries rather than looking at the opportunities that are available "out there". Only very few companies have started outsourcing*

intermediate processing, such as upper cutting or upper stitching abroad. Especially to Eastern Europe. But the great majority of them is worried more in terms of protectionism, on how we can safeguard the sector by relying on anti-dumping measures. That's why we are so committed in lobbying the Commission to get adequate some anti-dumping measures in place, especially for leather footwear (Interview with one of the key informants).

7.2.5 Montebelluna - Forward linkages

Forward linkages mainly consist of the relationships with buyers, mostly distributors and retailers as none of the respondents directly sell their products on the final market. To this end, in the questionnaire the respondents were asked to identify their three main buyers (to be listed in order of importance) and to indicate for each one their geographical distance from the firm in miles:

Table 7.13: Geographical distance with buyers in Montebelluna

Distance	Minimum	Maximum	Mean	N of cases
1st Buyer	1.25 miles	5000 miles	947.60	14
2nd Buyer	1.875 miles	1875 miles	540.18	14
3rd Buyer	6.25 miles	5000 miles	1022.31	14
Mean (/3)			**836.69 miles**	

Interestingly, geographical proximity does not seem a crucial factor as the majority of buyers seem to be located outside the district. The respondents were also asked about the length in years of their relationships with the three main buyers, which is presented in Table 7.14:

Table 7.14: Length of relationships with buyers in Montebelluna

Length	Minimum	Maximum	Mean	N of cases
1st Buyer	5 years	19 years	10.71	14
2nd Buyer	3 years	24 years	9.71	14
3rd Buyer	1 years	24 years	9.14	14
Mean (/3)			**9.85 years**	

They were also prompted about the nature of the relationships with the three buyers. They were asked to broadly identify their relationship among a choice of three options: a social relationship irrespective of any commercial/business relationship; a strictly commercial/business relationship; a social relationship as the result of any existing commercial/business relationship. The responses concerning the relationship nature with the most important buyer indicate that: 57.1% of the respondents (8 firms) have 'a social relationship irrespective of any commercial/business relationship', while the remaining 42.8% (6 firms) stated that they have 'a social relationship as the result of any existing commercial/business relationship'. None among the respondents stated that they have strictly commercial/business relationships with the most important buyer. As for the second buyer in order of importance, all the respondents stated that they have 'a social relationship irrespective of any commercial/business relationship'. As for the third buyer, 85.7% of the respondents (12 firms) stated that they have 'a social relationship irrespective of any commercial/business relationship', while the remaining 14.3% (2 firms) stated that they have 'a social relationship as the result of any existing commercial/business relationship'. However, none among the respondents stated that they have strictly commercial/business relationships with buyers.

As for cooperation with buyers for the local market, 85.7% of the respondents (12 firms) stated that they cooperate 'a lot' in setting product specifications, while 71.4% (10 firms) cooperate to exchange information and experience as well as engaging joint quality control activities (see Table 7.15).

Table 7.15: Cooperation with buyers for local market in Montebelluna

	A lot	A little	Never
Exchange of information and experience	**71.4%**	**28.6%**	**0**
Negotiation of payment and delivery conditions	**42.8%**	**57.1%**	**0**
Technological upgrading	**35.7%**	**28.6%**	**35.7%**
Quality control	**71.4%**	**28.6%**	**0**
Setting of product specifications	**85.7%**	**14.3%**	**0**
Organisation of production	**14.3%**	**14.3%**	**71.4%**

As for cooperation with buyers for export, 71.4% of the respondents (10 firms) stated that they cooperate in relation to exchange of information and experience, 57.1% (8 firms) cooperate 'a lot' to set product specifications as well as engaging in joint quality control activities:

> *When we get a big order from C. (one of the major chains of multistore retailer), they often ask for a model that's quite similar to one that we have just produced for one of the main designer. Obviously they need to sell cheaper, so perhaps they go for a similar prototype but choose cheaper materials. We generally*

discuss the product specifications quite thoroughly so that there won't be room for any misunderstanding (Interview with Kappa, Director).

Overall, from the data collected through the questionnaire, the producer-buyers relationship seems to be quite tight, in terms of its length (almost 10 years on average), its nature (mainly social) and level of cooperation but it is not based on geographical proximity (836.69 miles on average). This issue was further explored through the semi-structured interviews.

Table 7.16: Cooperation with buyers for export in Montebelluna

	A lot	**A little**	**Never**
Exchange of information and experience	**71.4%**	**0**	**28.6%**
Negotiation of payment and delivery conditions	**42.8%**	**28.6%**	**28.6%**
Technological upgrading	**28.6%**	**42.8%**	**28.6%**
Quality control	**57.1%**	**14.3%**	**28.6%**
Setting of product specifications	**57.1%**	**14.3%**	**28.6%**
Organisation of production	**14.3%**	**0**	**85.7%**

When asked about the most valuable sources of information for district firms, interviewees agreed that distributors and retailers play a crucial role. According to the interviewees, the information provided by distributors is very *'patchy'* and not very accurate – they seem unaware of how well different products sell, why they are sold and at what price:

Distributors, they don't have a clue. They don't know how well different products sell, why consumers buy them and how much people pay for them. We get very "patchy" information from distributors, they might know few things but I don't regard them as being helpful (Interview with Xi, owner).

Retailers provide more accurate information as they are in closer contact with the final customers and they have a more in-depth knowledge of their preferences as well as of their purchasing power:

Retailers tend to know much more because they deal with the final consumer themselves. They see what product sells, why people like it and how much they pay for it. They see this, everyday and they compare our sales with our competitors (Interview with Xi, owner).

One of the interviewees describes one of the main issues regarding retailers:

They tend to be quite conservative about interpreting customer choices and forecasting future demand as their main goal is to sell as much as possible they don't seem too keen in taking risks (Interview with Eta, owner).

7.2.6 Northampton – Forward linkages

Forward linkages mainly consist of the relationships with buyers, mostly distributors and retailers, as none of the respondents directly sell their products on the final market. To this end, in the questionnaire respondents were asked to identify their three main

buyers (to be listed in order of importance) and to indicate for each one their geographical distance from the firm in miles:

Table 7.17: Geographical distance of buyers

Distance	Minimum	Maximum	Mean	N of cases
1st Buyer	50 miles	160 miles	132.14	14
2nd Buyer	5 miles	280 miles	115.71	14
3rd Buyer	5 miles	110 miles	87.50	14
Mean (/3)			**111.8 miles**	

Interestingly, it emerges that geographical proximity seems to be a crucial factor as the majority of buyers seem to be local. The respondents were also asked about the length in years of their relationships with the three buyers:

Table 7.18: Length of relationships with buyers

Length	Minimum	Maximum	Mean	N of cases
1st Buyer	5 years	20 years	10	14
2nd Buyer	3 years	5 years	4.29	14
3rd Buyer	1 years	5 years	3.64	14
Mean (/3)			**5.98 years**	

The respondents were also prompted about the nature of the relationships with the three buyers. They were asked to broadly identify their relationship among a choice of three options: a social relationship irrespective of any commercial/business relationship; a strictly commercial/business relationship; a social relationship as the result of any existing commercial/business relationship. The responses concerning the relationship nature with buyers indicated that 85.7% of the respondents (12 firms) have a business relationship with the most

important buyers, 78.5% (11 firms) have a business relationship with the second buyer and 85.7% (12 firms) of the respondents have a business relationship with the third buyers.

As for cooperation with buyers for the local market, 71.4% of the respondents (10 firms) stated that they cooperate 'a lot' in relation to negotiation of payment and delivery conditions, 50% (7 firms) in technological upgrading and setting product specifications, 42.8% (6 firms) in organisation of production (see Table 7.19).

Table 7.19: Cooperation with buyers for the local market

	A lot	A little	Never
Exchange of information and experience	**21.4%**	**78.5%**	**0**
Negotiation of payment and delivery conditions	**71.4%**	**28.6%**	**0**
Technological upgrading	**50%**	**0**	**50%**
Quality control	**28.6%**	**71.4%**	**0**
Setting of product specifications	**50%**	**50%**	**0**
Organisation of production	**42.8%**	**28.6%**	**28.6%**

As for cooperation with buyers for export, 50% of the respondents (7 firms) stated that they cooperate 'a lot' in relation to exchange of information and experience as well as negotiation of payment and delivery conditions and technological upgrading; only 42.8% (6 firms) cooperate 'a lot' in relation to the organisation of production and only 21.4% (3 firms) cooperate 'a lot' in setting product specifications. Table 7.20 displays the results for cooperation with buyers for export.

Table 7.20: Cooperation with buyers for export

	A lot	A little	Never
Exchange of information and experience	**50%**	**21.4%**	**28.6%**
Negotiation of payment and delivery conditions	**50%**	**50%**	**0**
Technological upgrading	**50%**	**21.4%**	**28.6%**
Quality control	**50%**	**21.4%**	**28.6%**
Setting of product specifications	**21.4%**	**50%**	**28.6%**
Organisation of production	**42.8%**	**28.6%**	**28.6%**

Overall, from the questionnaire it emerges that the producer-buyers relationship seems to be quite loose, in terms of its length (almost 6 years on average), its nature (mainly business) and low level of cooperation, however it is based on geographical proximity (111.8 miles on average). This issue was further investigated through the semi-structured interviews. When asked about the most valuable sources of information for district firms, some of the respondents mentioned workshops that are promoted by the FLAG:

> *FLAG was used to organise some training events, a two-day workshop, often covering the opportunities offered by specific foreign markets..those seminars were really interesting and useful* (Interview with Nu, Owner).

As one of the interviewees stated:

> *The footwear business is increasingly becoming global, FLAG's key objective is to encourage local firms to make best possible use of*

the international business opportunities available – (Interview with one the key informant).

Other interviewees placed emphasis on the role of BLC Leather Technology Ltd that offers several services: from market research reports, sample testing as well as training:

BLC Leather Technology, is a good source for information. It provides market research, sample testing as well as they organise some conferences on a wide range of different topics (Interview with Mu, owner).

7.2.7 Montebelluna - Horizontal linkages

As for cooperation with other local producers and competitors, the questionnaire data indicates that 71.4% of the respondents (10 firms) cooperate 'a lot' by lending machinery, 57.1% (8 firms) cooperate 'a lot' by exchanging information and experience. Only 28.6% (4 firms) cooperate 'a lot' by engaging in joint product development activities.

Table 7.21: Cooperation with local producers in Montebelluna

	A lot	A little	Never
Exchange of information and experience	**57.1%**	**28.6%**	**14.3%**
Sharing orders	**0**	**0**	**100%**
Joint product development	**28.6%**	**14.3%**	**57.1%**
Lending machinery	**71.4%**	**0**	**28.6%**
Joint marketing for products	**0**	**28.6%**	**71.4%**
Joint labour training	**0**	**28.6%**	**71.4%**
Joint purchase of input	**0**	**28.6%**	**71.4%**

Despite the fact that firms do not seem very willing to cooperate with other local producers and competitors, and they all seem more than happy to lend machinery if they need to, no direct cooperation takes place with competitors in regard to the organisation of production. This issue was further explored in the semi-structured interviews:

> *When one of my machines broke down I had to borrow a machine from a company down the road. It was just for a couple days...It wasn't a big issue, it's just something that we do and nobody has a problem with that. If you don't need that particular machine straight away you could lend it to someone who needs it* (Interview with Iota, other).

Or as someone else stated:

> *I am actually happy to lend one of my machines if I don't need it and only if I trust the person. This doesn't happen very often though, and I don't have any problem with letting the workers in my premises to collect it. But the "relationship" as you call it, stops there: we don't give each other tips if is that what you were inferring...cooperation in this sense, I think it's largely a myth* (Interview with Eta, owner).

A few attempts have been made to cooperate in waste disposal and the use of common external subcontractors. Both initiatives did not succeed and the respondents explained the failure by widespread mistrust amongst competitors. One of the interviewees specifically stated that:

As it was clear from the outset that everybody had its very own preferences and nobody seemed to be willing to compromise, the initiative did not take off. The choice of subcontractors is a very delicate one and nobody was trustful enough to take on board their competitor's view as a genuine suggestion (Interview with Mu, owner).

Although the majority of those interviewed did not believe in the local cooperation-oriented initiatives amongst competitors, they did attend local meetings and business events to nurture their social relationships and to show social responsibility. In particular one of the interviewees stated that:

Don't think that those meetings set up by the Chamber of Commerce with local producers are helpful but I still go because I would look bad on me if I didn't attend. It would look like I didn't care about them (Interview with Eta, owner).

Furthermore when prompted to talk about cooperation with competitors, firms often dismiss cooperation as *'a myth'* – although cooperation is often described as a key feature of industrial districts, according to the respondents this cooperation in reality does not take place. The common concern amongst the interviewees is that *'by doing things in a similar way the competitive advantage of the single firm would be lost'* (Interview with Eta, owner).

According to one of the key informants, cooperation is not a possibility for competitors, especially in relation to the current competitive environment they are nested in. According to key informants as well

as firms, the attitude towards cooperation is also changing. An example of a newly established initiative is the launch of a joint promotion program amongst four large local firms that are opening shops together all over the world to jointly sell their footwear products:

> *I don't know to what extent cooperation would be a possible answer to the current competitive environment. Surely cooperation is changing: cooperation around sales and marketing, placing a strong emphasis on the single brand is perhaps the only way forward to defy the growing power of retail chains and MNCs alike* (Interview with one of the key informant).

According to the firms interviewed, monitoring competitors plays a crucial role in achieving competitive advantage. Nearly all the firms had samples of their competitor products. Competitor products often provide '*good ideas and small improvements*' (Firm owner, Alpha) that are incorporated into existing products by being adapted to the knowledge base of the imitating firm and to the preference of its customers. Some of the interviewees have arranged to have some of their prototypes tested in remote countries such as China to prevent competitors imitating their product. Notwithstanding that nearly all the interviewees recognised the issue of dealing with imitation from competitors, those interviewed estimated that imitation has an overall positive impact on the innovation rate of the district as a whole:

> *I don't see it* (imitation of competitor's product*) as cheating. At the end of the day it's a big incentive for us to improve our products* (Interview with Beta, managing director).

In particular, it was believed that imitation alongswith the high degree of transparency of information within the district represent a strong incentive for leader firms to keep the pace and stay competitive.

7.2.8 Northampton – Horizontal linkages

As for cooperation with other local producers and competitors, from the questionnaire it emerges that 78.5% of the respondents (11 firms) never cooperate in joint product development or joint marketing for products, while 50% (7 firms) cooperate 'a lot' by exchanging information and experience and all the respondents cooperate 'a little' on lending machinery (see Table 7.22).

Despite the fact that firms do not seem very willing to cooperate with other local producers and competitors, they all (14 firms) seem quite happy ('a little') to lend machineries if they need to however, no direct cooperation takes place with competitors in regard to the organisation of production. This issue was further explored through the semi-structured interviews.

Table 7.22: Cooperation with local producers

	A lot	A little	Never
Exchange of information and experience	**50%**	**50%**	**0**
Sharing orders	**0**	**50%**	**50%**
Joint product development	**0**	**21.4%**	**78.5%**
Lending machinery	**0**	**100%**	**0**
Joint marketing for products	**0**	**21.4%**	**78.5%**
Joint labour training	**21.4%**	**50%**	**28.6%**
Joint purchase of input	**0**	**50%**	**50%**

One of the interviewees stated that:

> *I wouldn't go to my cousin* (who is the managing director of a competing firm) *to ask for advice, nor to ask for his machineries. I know I would be putting him in a difficult position* (Interview with Xi, owner).

In relation to this issue, one of the key informants in particular pointed out how that:

> *In Northampton there is a peculiar mix of cooperation and competition as manufacturers cooperate very well on certain issues but are very secretive about others. The whole thing is quite mysterious: they are very helpful for example when a machine breaks down and they let competitors borrow theirs, or they are happy to lend a skilled worker if they need to; however they don't like to allow competitors like the director or the owner inside their own factory because they believe that some mysterious secrets could be "stolen". This seems quite illogical because there aren't secrets at all since they are all making pretty similar products'* (Interview with one of the key informants).

One attempt of cooperation around a joint marketing initiative should be mentioned - the creation of a cross-industry stamp of approval and emblem of quality has recently led to the British Goodyear Welted Seal, a Wool mark-style, to be used as a marketing weapon in the domestic market and abroad.

One key informant suggests that it may have taken an outsider's eye to see the obvious:

> *I came to this as an outsider looking in. My background has been in fashion and clothing and I came into this very tight knit industries that has a lot of synergies. And there seemed to be some logics in using the economies of scale and getting manufacturers to work together. And there was the kernel of an idea* (Interview with one of the key informants).

The project involves 26 manufacturers and the British Footwear Association and is aimed to promote the launch of the mark and to promote education for both retailers and consumers. According to the same key informant:

> *The Goodyear welted process represents a hidden strength of the British footwear industry and it is not promoted widely. A big part of the campaign is therefore about education, demonstrating to the consumers what the Goodyear welted process involves and its underlying benefits* (Interview with one of the key informants).

The project is also supported by the DTI (the Department of Trade and Industry) in terms of both financial issues and with regards planning in order to ensure that the campaign would reach an international dimension. Over 2,500 presenters are sent out to embassies and trade bodies around the world as well as 20,000 brochures. However, it is its manufacturers who are at the heart of the scheme. Financially they are all making significant contribution on a sliding scale according to size of the company and the levels of Goodyear welted production. Those

involved range from more traditional brands, through to high-fashion and street-fashion names, as well as retailers and contract manufacturers.

Even though 70% of the production in Northampton is made for export, the welted footwear is still undersold at the time of writing and the seal is designed to do more than boost the profile of traditional Northampton brands. First the seal is aimed to make consumers aware of the breadth of products that features the Goodyear process – not only shoes and boots but also a wide variety of products. Secondly the mark reflects the more prosaic need to justify the price tag that the process carries with it. In addition, the success of the mark will depend on a strong incorporation of the seal into the marketing message of the manufacturers. There are some differences about how central the seal will be to their brand's image building. For the majority of manufacturers:

> *We are not too convinced about this initiative. Many of us think that the seal is only a part of an overall message that has to be incorporated into a wider appeal. The seal can add value and credibility to the brand but it is a background issue: the styling must be the main selling point, not the construction* (Interview with Kappa, owner).

However manufacturers use the mark, for the scheme to work effectively, manufacturers will also have to work with retailers to make sure that the message is put across strongly at point of sale. To this end, many manufacturers are increasingly devoting their efforts towards training and educating retail staff about the process. According to some

retailers, the technical aspects of the campaign could have appeal to a younger audience that is increasingly aware of and hungry for products with a technical and authentic edge. However, not all retailers are very enthusiastic about the seal as the welted shoe is seen as in terminal decline and the advent of the mark will do nothing to halts its demise:

> *Increasingly people are looking for a much softer construction with other lightweight flexi-soles now and they are going less for the formal styles* (Interview with one of the key informants).

From the interviews also emerges that there is the need to make sure that the seal has real value and credibility. To this end, the BFA will need to keep a tight control over the use of the seal and its intellectual property although there is a broad spread of manufacturers, at different price levels, involved:

> *The difficult part will be monitoring the use of the seal. Only in this way the seal could assure consumers on its real value and credibility. This is going to be difficult since there are so many manufacturers involved selling at different price ranges* (Interview with Beta, managing director).

7.2.9 Montebelluna - Linkages with other organisations

In order to investigate the network of public and private organisations that supports firms in the district, in the questionnaire contained questions relating to the respondent's relationships with a broad range of local organisations, either industry-based, commercial organisations, governmental supported associations, special interest organisations, community based or social organisations.

To this end, the respondents were asked to identify some of their personal contacts and to rate them on a Likert scale according to their relevance to their business.

As for contacts with industry-based associations, nearly all the respondents have strong connections: 71.4% (10 firms) have contact with both business owners association and trade associations, while 57.1% (8 firms) have contact with a technology centre. Interestingly, only a minority (42.8%, 6 firms) of the respondents who have contact with the technology centre thinks that the relationship is very relevant to their business.

Table 7.23: Contacts with industry-based associations in Montebelluna

	Yes	**Relevance to the business** (1-2=Irrelevant, 3=The same 4-5= Relevant)		
		Irrelevant	**The same**	**Relevant**
Business owners' association	**71.4%**	42.8%	0%	**57.1%**
Trade association	**71.4%**	57.1%	14.3%	**28.6%**
Technology centre	**57.1%**	57.1	0%	**42.8%**

When asked about the provision of technological expertise, 42.8% of the respondents (6 firms) declared that they developed some technological innovation in cooperation with suppliers of technology such as suppliers of machinery. 57.1% of the respondents (8 firms) think that their main sources of technological information are the suppliers. A crucial role in the diffusion of technological information is

also played by exhibitions and specialised fairs according to 71.4% of the respondents (10 firms). This issue was further investigated during the semi-structured interviews.

According to one of the respondent, *fairs give good inspiration, but are also focal point to meet new business partners and exchange information with competitors'* (Interview with Kappa, managing director). Some of the interviewed firms met their designers at trade fairs. From the interviews it also emerges that of crucial importance in relation to the fashion and design input is the recently established and observatory, the *Osservatorio Internazionale sulla Moda e Consumi per lo Sportsystem* (founded by the Ski-Boot Museum)*:*

> *All of what they do is very informative to us. They do a lot of market research on a global scale by having us involved in projects with some of the most international firms. They arrange talks with famous designers* (Interview with Lamda, other).

The initiative is aimed at enabling access to critical information for local firms in order to make them more receptive towards new global trends. The long-term aim of the project would be to turn local firms from being trend followers to establishing themselves as trend setters (Interview with one of the key informant). Most of the interviewees are sceptical about the success of this initiative partly because of the internal competition among district firms and partly because they believe that the competitive advantage of the single firm mainly relies on the individual capability to select information on global trends and to interpret them differently:

I don't know how effective they are - there is a lot of competition and our market share depends on how we do things differently: my idea of fashion could be very different from theirs and in any case we try to interpret those ideas differently (Interview with Zeta, owner).

As for relationships with commercial associations, from the questionnaire it emerges that 71.4% of the respondents (10 firms) have relationships with professional event services and consultants, 57.1% (8 firms) with investor groups and 42.8% (6 firms) with business incubators. Table 2.24 displays the results.

Table 7.24: Contacts with commercial associations in Montebelluna

	Yes	**Relevance to the business** (1-2=Irrelevant, 3=The same 4-5= Relevant)		
		Irrelevant	**The same**	**Relevant**
Investor groups	**57.1%**	57.1%	42.8%	**0%**
Business incubators	**42.9%**	100%	0%	**0%**
Professional event services	**71.4%**	57.1%	14.3%	**28.6%**
Consultants	**71.4%**	28.6%	14.3%	**42.8%**

This issue was further explored during the interviews and it emerged that professional event services and consultants are often seen as key network facilitators providing support for firm survival and development and providing other possible means through which firms might be linked. In particular accountants and solicitors are the most likely consultants to be used as sources of advice by the interviewees:

I ask him so many questions. But we do get a lot of advice coming from this end, saying that you should be doing this or that you should be doing that (Interview with Epsilon, owner).

As for government supported associations, from the questionnaire it emerges that although nearly all the respondents have contacts with firm advisors and Training Enterprise Councils (71.4%, 10 firms), very few rate them as relevant (14.3%, 2 firms) to their activities. Only a marginal portion of the respondents (28.6%) is in contact with the regional development agencies.

Table 7.25: Contacts with government supported associations

	Yes	**Relevance to the business** (1-2=Irrelevant, 3=The same 4-5= Relevant)		
		Irrelevant	**The same**	**Relevant**
Firm advisors	**71.4%**	28.6%	42.95	**28.6%**
Training Enterprise Council (TECs)	**71.4%**	42.8%	14.3%	**42.8%**
Regional development agency	**28.6%**	71.4%	14.3%	**14.3%**
Training centres	**42.9%**	57.1%	14.3%	**28.6%**
Universities	**28.6%**	57.1%	28.6%	**14.3%**

Quite surprisingly none of the respondents has any contact with special interest associations such as environmental associations, political parties, community-based associations such as parent/school

groups, neighbourhood watch schemes or charity groups (e.g. round tables or Lions).

Table 7.26: Contacts with social organisations

	Yes	Relevance to the business (1-2=Irrelevant, 3=The same 4-5= Relevant)		
		Irrelevant	**The same**	**Relevant**
Sports clubs	**28.6%**	71.4%	14.3%	**14.3%**
Working clubs	**14.3%**	85.7%	0%	**14.3%**

However, a tiny minority of respondents however attends social organisations such as sports clubs (28.6%, 4 firms), just very few rate them relevant to their business (14.3%, 2 firms) and working clubs (14.3%, 2 firms) which very few rate them relevant to their business (14.3%, 2 firms). This issue was further explored during the interviews. When asked about this peculiarity, one the interviewees simply stated that *'they are too busy to socialise in conventional ways'* (Interview with Theta, owner).

7.2.10 Northampton - Linkages with other organisations

As with Montebelluna, in order to investigate the network of public and private organisations that supports firms in the district, the questionnaire contained questions regarding the respondent's personal ties in relation to his/her relationships with a broad range of local organisations either industry-based, commercial organisations, governmentally supported associations, special interest organisations, community based or social organisations. To this end, the respondents were asked to identify some of their personal contacts and to rate them on a Likert scale according to their relevance to their business.

As for contacts with industry-based associations, from the questionnaire it emerges that nearly all the respondents have strong connections: 78.5% (11 firms) have contact with both business owner's associations and technology centres, while all the respondents have contacts with trade associations. Interestingly a very small minority (21.4%, 3 firms) of the respondents who have contact with the technology centre thinks that the relationship is very relevant to their business.

Table 7.27: Contacts with industry-based associations

	Yes	**Relevance to the business** (1-2=Irrelevant, 3=The same 4-5= Relevant)		
		Irrelevant	**The same**	**Relevant**
Business owners' association	**71.4%**	42.8%	0%	**57.1%**
Trade association	**100%**	0%	50%	**50%**
Technology centre	**71.4%**	78.5%	0%	**21.4%**

When asked about the provision of technological expertise, 28.6% of the respondents (4 firms) declared that they developed some technological innovation in cooperation with suppliers of technology such as suppliers of machinery. A very small minority (14.3%, 2 firms) of the respondents think that their main sources of technological information are the suppliers. This issue was further explored through the semi-structured interviews.

According to nearly all the interviewees the district is lagging behind in terms of innovation, more precisely they argue that there is the need to encourage innovation to ensure that the local industry makes best use of new technology and e-commerce:

> *We don't innovate as such, we are all still doing the same things. We are trying to capitalise on our traditions...we use the same technology that we had when my father had to run this factory. That machine for example must be at least 20 years old...* (Interview with Nu, owner).

Someone else described the use of e-commerce:

> *We don't sell our shoes on the internet, we work with a company that takes care of that. I don't think many companies around here use internet for e-commerce, I think we were quite innovative in that respect. A very small share of our sales comes from e-commerce, though* (Interview with Delta, owner)

To this end, it is worth pointing out that one of the key informants indicated that the British Footwear Association is involved in several projects to increase awareness of the importance of innovation as well as the importance associated with the use of information and communication technology. Of particular importance in relation to innovation is the Footwork Leonardo project which aims to transfer training materials for Computer Aided Design (CAD) in footwear between training institutes in the UK, France, Spain, Italy and Greece. Technological developments have seen a great rise in the attractiveness of CAD for footwear design, and it is important that

footwear training courses keep up with these developments. Partners in the project include an educational provider (Cordwainers College at the London College of Fashion) as well as various international actors (the Spanish footwear research institute INESCOP, the Greek research institute ELKEDE, the French Footwear Association and the Tuscan Footwear service centre Ce.Se.Ca).

In relation to the provision of technological expertise, another project that should be mentioned is the Footprint project. The project researches strategies for improving information and communication technologies in Northampton as well as in the British footwear industry at large. Partners include local associations as well as some educational providers (Cordwainers College at the London College of Fashion). The main output is an implementation plan that discusses the potential use of various information and communication technologies for the footwear sector.

Along with these two main projects, the British Footwear Association is trying to involve local manufacturers to take part in the Quickfoot Adapt project which aims to help them adjust to the impact of globalisation. The initiative is training orientated, mainly through the use of diagnostic company visits and targeted events of interest. Partners include educational providers such as Nottingham Trent University and Cordwainers College at the London College of Fashion, and some local associations. In addition, some of the larger local firms have made expertise available to the participants in a mentoring role.

Additionally from the same interview, it emerged that a crucial role in the diffusion of technological information is also played by exhibitions and specialised trade fairs. In this regard, the British Footwear

Association provides local firms with representation at key overseas fairs and access to national and EU grants for overseas shows.

As for relationships with commercial associations, the questionnaire data indicates that 50% of the respondents (7 firms) have relationships with professional event services and consultants, 28.6% (4 firms) with investor groups and none of the respondents have relationships with business incubators. This issue was further explored during the interviews. As with Montebelluna, professional event services and consultants are often seen as key network facilitators providing support for firm survival and development and also providing other possible means through which firms might be linked.

Table 7.28: Contacts with commercial associations

	Yes	**Relevance to the business** (1-2=Irrelevant, 3=The same 4-5= Relevant)		
		Irrelevant	**The same**	**Relevant**
Investor groups	**28.6%**	100	0%	**0%**
Business incubators	**0%**			
Professional event services	**50%**	50%	50%	**0%**
Consultants	**50%**	21.4%	78.5%	**0%**

In particular accountants and solicitors are the most likely consultants to be used as sources of advice by the interviewees:

> *Accountants and solicitors provide a good deal of information. Every time I am not quite sure myself about things I call my*

accountant to get some suggestions..if she likes the question I get a good answer (Interview with Iota, owner).

As for government supported associations, from the questionnaire it emerges that quite surprisingly none of the respondents have any contact with Training Enterprise Councils. 50% of the firms (7 firms) have contacts with firm advisor and only a marginal portion of the respondents (28.6%, 4 firms) have direct contacts with both training centres and universities.

Table 7.29: Contacts with government supported associations

	Yes	**Relevance to the business** (1-2=Irrelevant, 3=The same 4-5= Relevant)		
		Irrelevant	**The same**	**Relevant**
Firm advisors	**50%**	50%	0%	50%
Training Enterprise Council (TECs)	**0%**			
Regional development agency	**21.4%**	78.5%	21.4%	**0%**
Training centres	**28.6%**	42.8%	57.1%	**0%**
Universities	**28.6%**	71.4%	28.6%	**0%**

This issue was further explored during the interviews. In particular concerning relationships with universities and training institutes one of the key informants pointed out that:

Some local manufacturers are experiencing difficulties in recruiting experienced operatives. The skilled workforce is diminishing as the industry fails to attract school leavers into footwear

manufacturing. As a result there is the need to ensure that the district has access to a skilled workforce by improving the industry's image in the community, schools and higher education - (Interview with one of the key informants).

In addition, one of the interviewees claimed that there is the need to ensure that the district is able to attract and develop managers. This need is twofold:

If on the one hand, there is the need to encourage recognition of the existing managerial skills; on the other hand, there is the need to ensure suitable training and development opportunities for existing managers to help them reposition their business (Interview with Eta, managing director).

From the questionnaire it emerges that none of the respondents has any contact with special interest associations such as environmental associations or political parties. According to one key informant:

There is the need to increase awareness inside the district of environmental/sustainability issues and opportunities as well as foresight of long term threats' (Interview with one of the key informants).

As for community-based associations, 50% of the respondents (7 firms) have contacts with parent/school groups and half of these rate such contacts as being 'relevant' to their activities. Only a small minority (21.4%, 3 firms) is engaged in neighbourhood watch schemes

and half of the respondents with charity groups (e.g. round tables or Lions) but they rate their relevance to their business very low.

Table 7.30: Contacts with community-based associations

	Yes	**Relevance to the business** (1-2=Irrelevant, 3=The same 4-5= Relevant)		
		Irrelevant	**The same**	**Relevant**
Parents/School groups	**50%**	50%	50%	**0%**
Neighbourhood watching schemes	**21.4%**	78.5%	0%	**21.4%**
Charity groups/round tables/ Lions	**50%**	78.5%	21.4%	**0%**

Half of the respondents however attend social organisations such as sports clubs rating very low their relevance to their business. None of the respondents take part in any working clubs.

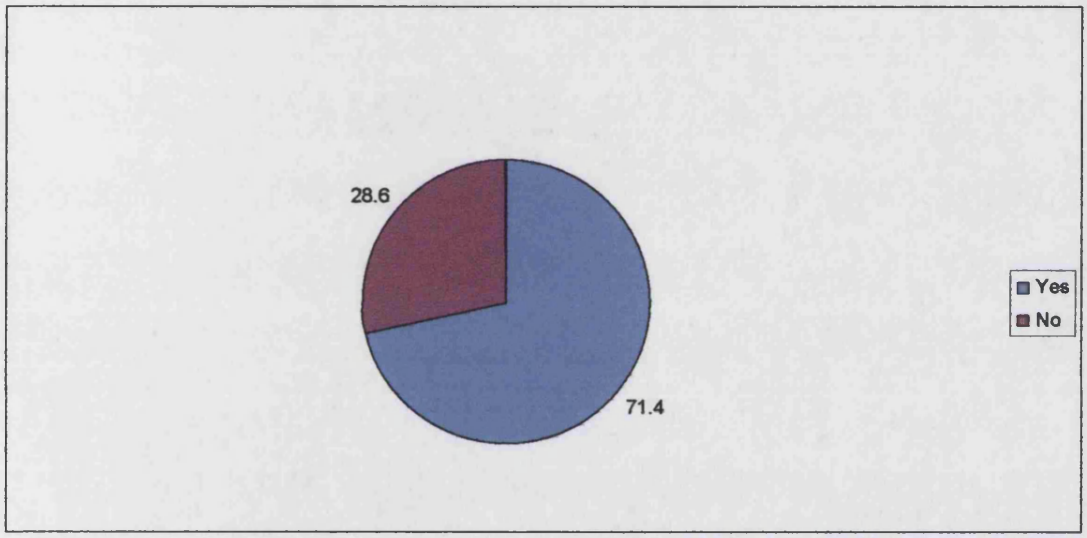
Table 7.31: Contacts with social associations

	Yes	**How would you rate their relevance to your activity?** (1-2=Irrelevant, 3=The same 4-5= Relevant)		
		Irrelevant	**The same**	**Relevant**
Sports clubs	**50%**	71.4%	0%	28.6%
Working clubs	**0%**			

7.2.11 Montebelluna - Performance of the firms

In order to investigate the performance of the firms, several indicators were collected through the questionnaire. Firstly, respondents were asked to state whether the firm is engaged in any export: 71.4% of the firms (10 firms) are export oriented while the minority (28.6%, 4 firms) is not engaged in any export activity.

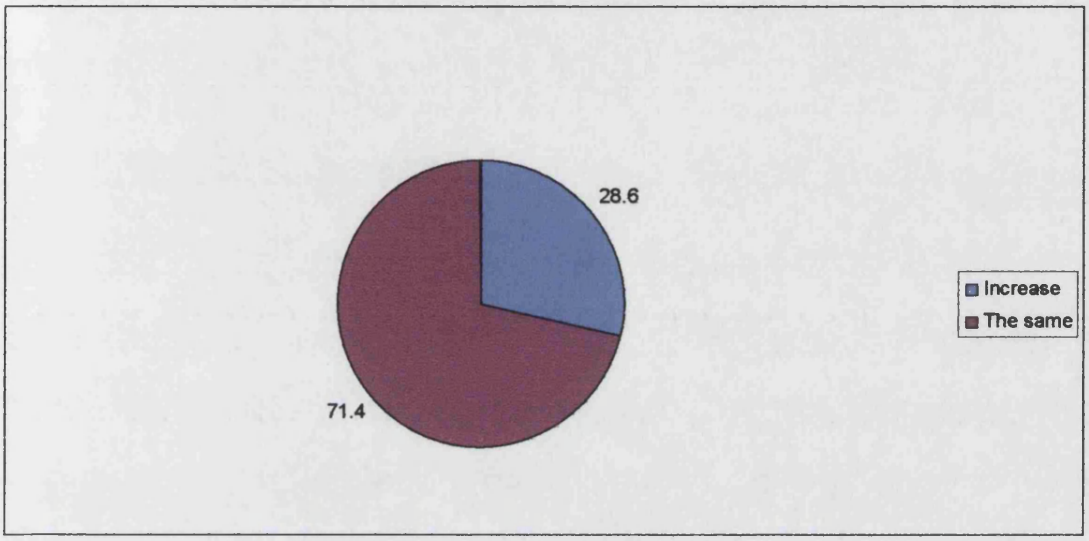
Figure 7.3: Montebelluna – Export



Secondly, the respondents were asked to express their satisfaction with the financial performance of the firm, by rating it on a Likert scale from very unsatisfying to very satisfying: all the respondents (100%, 14 firms) were satisfied with the performance of the business. Third, respondents were also prompted about the company cash-flow and again, all of them stated that they have a positive cash-flow. Fourth, respondents were asked about the production trend over the last five years. Three options were available (increase, same and decrease): 71.4% of the respondents (10 firms) stated that the production trend

has been increased, while the remaining 28.6% (4 firms) stated that production trend has been the same[25].

Figure 7.4: Montebelluna – Production Trend



One of the interviewees was particularly insightful when prompted to describe the performance of the district:

> *Perhaps things are not going too well at the moment, especially after the introduction of the euro. Some materials like skins or leather are very expensive now. I think our profit margins are steadily eroding. I am not sure how some of the small firms around here can still make it, I am expecting them to close down at any time really... (Interview with Beta, CEO).*

[25] In order to investigate between a possible correlation between some of the variables and performance of the firms several statistical tests such as Pearson chi-square test, factor analysis, cluster and correspondence analysis were attempted. However because of the limited size of the sample (14 firms), all tests displayed a low level of reliability. It was not therefore possible to draw any conclusions at firm level.

Or as someone else described the current business climate:

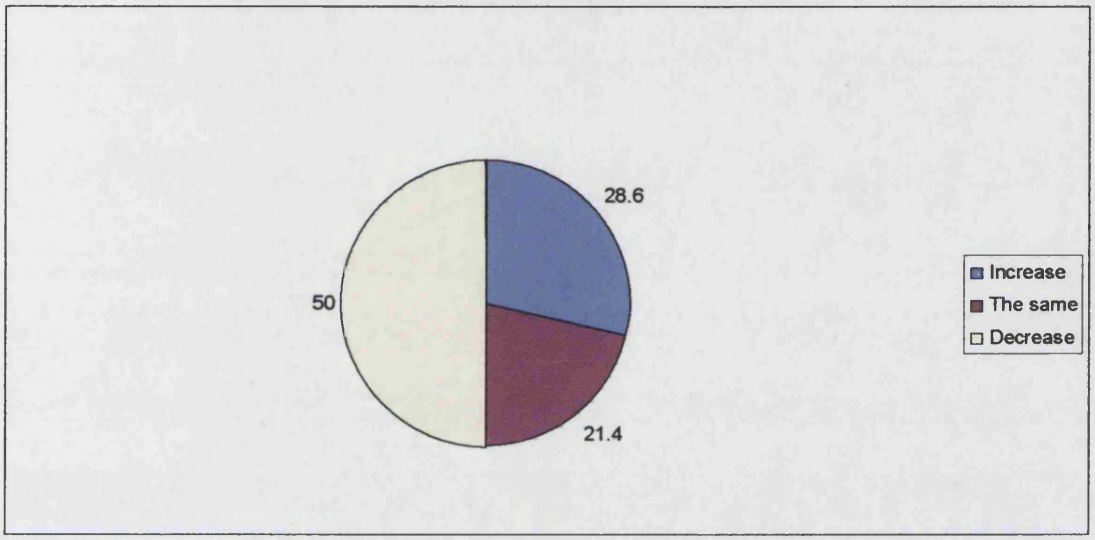
> *The company is doing well, I cannot complain. I think recession hit mostly those firms that work in the lower range of the market. Because of competition from emerging countries like China or Thailand most of these company were forced to shut down. I know several people that they had to close their factories or to sell them out..They are still working in the sector, maybe even in the same firm but now the company is ran by someone else* (Interview with Gamma, managing director).

7.2.12 Northampton – Performance of the firms

In order to investigate the performance of the respondents, several indicators were collected through the questionnaire. Firstly, respondents were asked to state whether the firm is engaged in any export: 57.1% of the firms (8 firms) are export oriented while the minority (42.8%, 6 firms) is not engaged in any export activity. Secondly, the respondents were asked to express their satisfaction with the financial performance of the firm, by rating it on a Likert scale from very unsatisfying to very satisfying: 28.6% (4 firms) were satisfied, while the majority (71.4%, 10 firms) were somewhat satisfied. Third, when prompt in relation to the company cash-flow, 78.5% of the respondents (11 firms) stated that they have positive cash-flow and only the remaining 21.4% (3 firms) has a negative cash-flow. Fourth, respondents were asked about the production trend over the last five years. Three options were available (increase, same and decrease): the majority of the firms (50%, 7 firms) stated that production has decreased in the last five years, according to 28.6% of

the respondents (4 firms) production has increased, while for the remaining 21.4% (3 firms) production has been the same[26].

Figure 7.5: Northampton – Production Trend



One of the respondents commented the current business climate as follow:

> *Things are bad at the moment. It's very hard to make any long term plan or to take up any long term commitment. Surely things could be much better. Since the beginning of this year we had to lay off several people..these people were working in the company for several years now. But I don't think we had many options* – (Interview with Alpha, managing director).

[26] In order to investigate between a possible correlation between some of the variables and performance of the firms several statistical tests such as Pearson chi-square test, factor analysis, cluster and correspondence analysis were attempted. However as it was for Montebelluna, because of the limited size of the sample (14 firms), all the tests that were attempted displayed a low level of reliability. It was not therefore possible to draw any conclusions at firm level.

Someone else when prompted similarly described the current state of affairs:

> *I don't know what other people say, but I am not happy with things. I don't think we get enough guidance on how things should be done to be more competitive. Surely people like yourself must know how these things work..On the other hand, it's difficult to tell people what to do: they have been in this business for years now, they are used to do things in their own ways* (Interview with Mu, owner).

7.3 Conclusions

Drawing on the secondary data that was assembled in Chapter VI to describe the district network structures of the two districts under investigation, the empirical findings from both the questionnaires and the interviews tend to confirm some of the main aspects that were previously discussed, namely the external inducements derived from technology and technological change as well as sectoral trends that have been endorsed by different endogenous responses. In this sense the findings tend to contradict the mainstream industrial district thesis discussed in Chapter III sections 3.2.2 and 3.2.3 that places a lot of emphasis on the importance of geographical proximity. By comparing the two different experiences of Montebelluna and Northampton, geographical proximity plays a rather ambiguous role. A more thorough discussion of this issue along with a more in-depth analysis of their social dimension will be provided in Chapter VIII.

Overall the empirical findings shed the light on some of the different extent of both intra-district and extra-district networks developed by the two districts in terms of: their geographical proximity, their stability over time, their social nature, the critical information that they provide, their level of cooperation and competition. From the analysis of the linkages with other organisations, the findings identify "the institutional thickness" of the districts and its perceived benefits.

In terms of backward linkages, in Montebelluna firms benefit from strong relationships with both suppliers and subcontractors. Backward relationships are predominantly local, long-lasting and particular emphasis is placed on their social dimension. Cooperation occurs with regards to exchanging information and experience, improving quality as well as joint product development. Whereas suppliers of machineries provide technical expertise, suppliers of components provide crucial information about sectoral trends and innovation. The provision of information is particularly crucial for smaller firms to survive.

Conversely, in Northampton, backward linkages are very different: the relationships with suppliers seem to be quite distant, recent, with the majority of the respondents stating that they only have strictly business relationships. Overall, the producer-supplier relationships are quite loose and firms display inconsistent attitude toward cooperation. In particular producers do not seem very loyal to local suppliers in their continuous attempt to keep the costs down. A very small minority of the respondents think that their main source of information is the suppliers. As for subcontractors, the decentralisation is manly local, only very few large firms mainly operating in the low segment of the market have started decentralising their production abroad.

As for forward linkages, in Montebelluna the producer-buyer relationship is very tight – it is often a long-term relationship where the social dimension plays an important role. Forward linkages do not tend to be developed in geographical proximity, but they rather tend to be developed nationally and internationally. Buyers not only provide valuable information on foreign markets but they also act as global-trend setters by spreading internationally cheaper imitation of designer shoes that are produced for a different market segment. Whereas cooperation with buyers for local market places more emphasis on technological upgrading and quality control, the same doesn't occur for cooperation for export. Additionally, distributors and retailers provide valuable information on foreign markets.

Conversely in Northampton, geographical proximity is more important, to the extent that the majority of buyers are local. Overall the producer-buyer relationship is quite loose and often a recent relationship where the business dimension is the predominant one. Again the scope for cooperation is limited to the negotiation of payment and delivery conditions, which could reflect the difficulties posed by the current business climate. Critical information on distant markets is provided here by local institutions.

As for horizontal linkages, in Montebelluna no direct cooperation occurs in relation to the organisation of production. Competition seems to play a far more important role: the common "business practice" of monitoring competitors to imitating their samples by introducing small improvements is a strong incentive for leader firms to stay competitive. Similarly in Northampton there is no direct cooperation over production,

although the district is engaged in a joint marketing initiative: The Goodyear Welted seal.

As for linkages with other organisations, quite similar patterns are displayed by both Montebelluna and Northampton. By considering relationships with the different local institutions, the perceptions of the relevance of these relationships to the business tend to vary. Where in Montebelluna there is a more positive perception of the different initiatives undertaken by several institutions, in Northampton respondents tend to be either less informed or more sceptical about their possible benefits. In particular as the result of the recent decline, the district is experiencing a shortage of skilled-workers as well as managerial skills. The need to train and develop opportunities for existing managers to help them to reposition their business has been stressed as one of the main priorities by the respondents.

Overall, as discussed in Chapter VI, the findings indicate that the governance of the district in Montebelluna has not relied on few "technological gate-keepers" that were able to absorb external knowledge; instead governance depended on large leading-firms (either local or foreign, independent firms or MNCs) that were able to provide critical knowledge as well as small specialised supplier firms that undertook independent paths of internationalisation. In this sense, the findings outline the presence of several firms: suppliers of components, buyers and retailers, that all provide valuable information. In Northampton, critical information is mainly provided by local institutions such as FLAG or BLC Leather Technology, however, the findings outline a significant contradiction in Northampton: where many respondents indicate local institutions as a valuable source of critical information in

relation to distant markets and technological innovation, when prompted to assess their relevance to their business, respondents rate it as very low. This raises the question of the extent of the real effectiveness of local policy intervention if the respondents do not perceive the benefits. This issue will be more thoroughly discussed in Chapter VIII section 8.2.5 when discussing the policy implications. A more encompassing discussion of the data collected through secondary sources, the questionnaires and the interviews will be provided in Chapter VIII while discussing the broader implications for the current research.

CHAPTER VIII THE COMPARISON: CONCLUSIONS AND THEIR IMPLICATIONS FOR FURTHER RESEARCH

8.1 The comparison: Montebelluna and Northampton

This chapter will briefly summarise the issues that have been raised so far before identifying the main differences between the empirical findings of the two industrial districts under investigation. It will also provide some conclusions and discuss implications for further research.

In Chapter III we saw how the literature places considerable emphasis on the presence of different kinds of networks as a proxy to distinguish between clusters and industrial districts as well as describes different typologies of industrial districts. In Chapter VI sections 6.5.1 and 6.6.1, drawing on secondary sources we argued that the comparison between Montebelluna and Northampton was validated by both districts possessing geographical concentration, sectoral specialisation as well as the presence of business networks. In this sense, we assumed that both districts could be aligned to industrial districts type I.

Chapter VII provided a closer assessment of the backward, forward and horizontal linkages as well as linkages with other organisations and we underlined how different emphasis was placed on the socio-economic networks that the two network structures tend to encompass. In light of the empirical evidence provided a further distinction can be made: whereas in Montebelluna socio-economic networks are associated with distinctive mechanisms of coordination, in Northampton far less emphasis is placed on their relevance. In this sense Montebelluna aligns best with the industrial district type II, while Northampton resembles more an industrial district type I. A

possible explanation for this could lie in the ongoing process of regeneration that is taking place in Northampton, with production shifting away from its traditional base towards more high knowledge intensive sectors such as business and the financial sectors. Since many factories are closing down, it is possible that the few existing socio-economic relationships are the outcome of this process of industrial restructuring.

This chapter will further elaborate on the comparison between the network structures of both districts, in order to gain additional insights into their viability. Section 8.2 will concern the findings and the main implications according to the levels of analysis previously identified in the theoretical framework; section 8.3 and 8.4 will describe the contributions as well as the limitations of the present research, before providing suggestions for future research in section 8.5.

8.1.1 Backward linkages

A) Suppliers

By comparing the degree of embeddedness with suppliers, the sample firms in Montebelluna and Northampton display different features. First, in Montebelluna firms tend to engage in relationships with fairly local suppliers (202.52 miles on average) with the exception of the most important supplier, which is often a supply of raw material such as leather or plastic (423.21 miles). Tanneries in particular play a very central role in determining the degree of competitiveness of the footwear sector. Conversely, in Northampton, firms tend to engage relationships with quite distant suppliers (436.43 miles on average) with the exception of the second supplier in order of importance, which is often a supply of component such as soles (78.93 miles).

Second, in Montebelluna the producer-suppliers relationship seems to be very tight, based on long term interaction (15.48 years) and cooperation. Cooperation with suppliers of leather and plastic is mainly based on exchanging information and experience as well as improving quality. Cooperation with suppliers of soles concerns negotiation of payments and delivery conditions, exchange of information and experience, joint product development as well as improving quality. Both producer and supplier believe that spatial proximity and the existence of a social long-term relationship are crucial factors in determining competitive advantage.

Interestingly, in Montebelluna none among the respondents stated that they have strictly commercial/business relationships with their suppliers. The majority of the respondents stated that they have a social relationship irrespective of any business relationship (85.7%, 12 firms). This facilitates the diffusion of transparent information which in turn brings several advantages: it discourages district firms from undertaking any opportunistic behaviour as well as making information about products widely available. The provision of information by component suppliers is crucial for smaller firms that do not have the capabilities to produce their original sample collection to survive.

In this sense, as discussed in Chapter III, section 3.4.3 backward embedded ties are associated with distinctive mechanisms of coordination: the presence of trust discourages opportunisms and makes information widely available; firms tend to share fine-grained information (e.g. sharing information and experience) and they engage in joint problem solving activities (e.g. joint product developments and quality improvement).

In Northampton, the situation is radically different: relationships with suppliers tend to be quite recent (5.5 years) with the majority of the respondents stating that they only have a strictly business relationship. Overall, in both cases – suppliers of materials and suppliers of components - the producer-supplier relationship seems to be quite loose, often involving a quite recent relationship based on long distance and where firms display inconsistent attitudes toward cooperation.

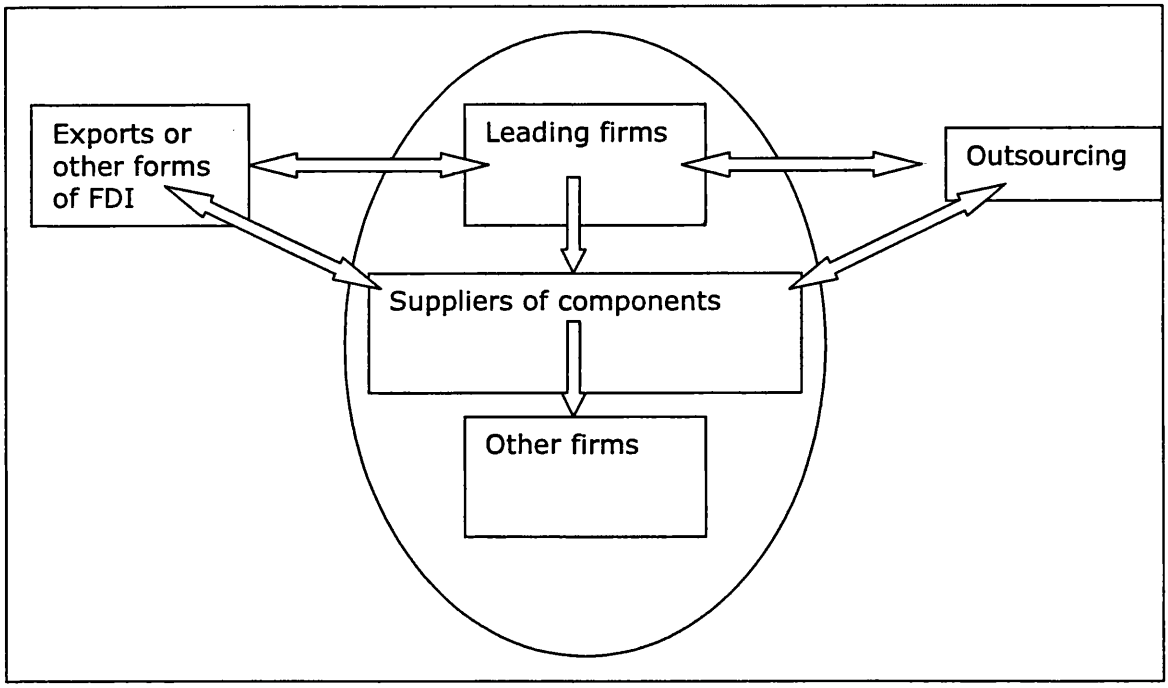
From the interviews conducted in Northampton, it is clear that neither producers nor suppliers believe that spatial proximity and the existence of a social long-term relationship are crucial factors in determining competitive advantage. The majority of the firms interviewed also declared that when problems arise with suppliers they normally rely on external advice provided by local institutions.

The findings support the literature discussed in Chapter III section 3.3.4, which claims that the presence of intra-district trade flows between producers and suppliers sustain the viability of industrial districts (i.e. Montebelluna) in terms of their endogenous dynamism (Garofoli, 1983). In addition the presence of local suppliers, who tend to provide valuable information, plays an important role for the district. Whereas suppliers of machinery provide technical expertise, suppliers of components provide crucial information about sectoral trends and innovation. The provision of information is particularly crucial for smaller firms to survive. In this sense component suppliers act as "gate-keepers of knowledge": they acquire valuable knowledge either from leading firms that are often more internationalised or from their own international experience, which they spread to other firms throughout the district at no additional cost (Giuliani, 2005). In other words, they share the benefits derived from the extra-district

networking activities undertaken by themselves or by the leading firms.

The following figure 8.1 displays a visual representation of this process. The circle identifies the imaginary boundaries of the industrial district:

Figure 8.1: The role of backward linkages



In Northampton, the district firms rely mostly on non-local suppliers and they do not display any loyalty to local suppliers. Two issues could be raised here: first, the lack of intra-district trade flows hinders the competitiveness of the district; second, although suppliers of materials are non-local, they do not provide critical information either on sectoral trends or technological innovation that would be necessary to keep the district up to speed with the competition. A small minority of the respondents think that their main source of information is the suppliers. In this sense, as discussed in Chapter III, section 3.4.3 disembedded linkages hinder coordination: the lack of trust that characterise social relations

undermines the value of the information exchange amongst the firms.

As for subcontractors, the decentralisation is mainly local, but not very extensive and only a few large firms, mainly operating in the low segment of the market, have started decentralising their production abroad. The limited effectiveness of backward linkages in terms of quick response, flexibility, lower stockholding and greater fashionability needs to be addressed if the district wishes to increase its competitiveness.

The following table compares the different degrees of embeddedness of the linkages with suppliers for both industrial districts, in relation to the different factors considered. Data on geographical distance, length of the relationship and its nature was collected through the questionnaire, while the semi-structured interviews provided some additional insights on the mechanisms of coordination.

Table 8.1: Embeddedness of the linkages with suppliers

District	Embeddedness			
	Geograph.	Length	Social Nature	Mechanism of Coordination
Montebelluna	Yes	Yes	Yes	Trust Fine-grained information transfer Joint problem solving activities
Northampton	No	No	No	Local institutions

From the comparison of the linkages with suppliers associated with their network structures, it emerges that the two industrial districts clearly display different degrees of embeddedness in relation to every factor considered (geographical proximity, length of relationships and their nature). From the interviews, it emerges that the districts rely on two different mechanisms of coordination: where Montebelluna relies on trust, fine-grained information transfer and joint problem solving arrangements, in Northampton firms tend to rely on the local institutions. These different mechanisms of coordination are associated with different benefits and different levels of transaction costs. Reputation for instance, in this context, discourages opportunistic behaviour and free-riders. By relying on an informal mechanism of coordination, district firms incur lower transaction costs than those firms that rely on more formal mechanisms of coordination, such as external advice provided by local institutions.

In this sense, the findings support the hypothesis outlined by the literature discussed in Chapter III section 3.4.3, according to which embeddedness is associated with distinctive coordination mechanisms, which in this case that facilitates economic action.

B) Subcontractors

In Montebelluna, several firms are extensively involved in outsourcing: from large firms (either local or foreign) to small firms that work as independent producers, suppliers of components or subcontractors that outsource some activities to second-tier firms.

As for manufacturers, firms follow a common pattern in their outsourcing strategy as they outsource those phases of production such as printing, upper cutting and upper stitching that are highly labour intensive but represent low-value added activities; while they

tend to keep creative input and design in-house, one of the most profitable links of the value chain.

According to the manufacturers interviewed, cooperation with subcontractors is a crucial asset to achieve competitive advantage. As it was for relationships with suppliers, cooperation is mainly based on exchange of information and experience and quality control. By delocalising stages of production within the district, the sample firms maintain stable and continuous linkages with subcontractors and exert a strict control over their work.

From the discussion of secondary data in Chapter VI section 6.6, it emerges that the delocalisation of stages of production outside the district mainly affects the production of shoes with a low technological content; shoes with a high technological content are still produced domestically. In particular, in relation to the production of shoes with a low technological content, outsourcing involves more final assembling than intermediate processing. On the one hand, the decentralisation of low-value added activities to foreign subcontractors can be interpreted as a form of functional upgrading whereby lower-value activities are externalised while high-valued added stages are maintained inside the district. On the other hand, the need to match high quality standards to be internationally competitive in both the medium-high and the high segments of the market has acted as a constraint to the international delocalisation of some stages of production to foreign subcontractors.

In Northampton, mainly large manufacturers in the low segments of the market are engaged in outsourcing. They display quite a similar pattern to Montebelluna as firms also outsource those phases of production such as hand stitching, upper printing and upper stitching that are highly labour intensive but represent low-value added

activities; while they tend to keep in-house most of the other phases from creative input to design, as well as the final stages such as lasting and finishing. Cooperation with subcontractors is mainly based on quality control and setting product specifications. As it was for Montebelluna, by delocalising production within the district, the sample firms engage in face-to-face contacts with subcontractors and can exert a strict control over their work. This helps to solve their problems timely and effectively.

Delocalisation of production is mainly local but less extensive than in Montebelluna and only a few firms have started to outsource production abroad. This feature not only suggests a lower degree of involvement of the district in the global value chain, but it also suggests that those manufacturers operating in relatively low segments of the market face very strong competitive pressure from emerging countries.

Overall in both districts, all high segment manufacturers have stable and strong relationships with subcontractors in order to have more guarantees in terms of quality. This seems a quite common strategy among firms that produce a medium-high or high quality product where the stability of the relationship is a crucial condition to maintain the required quality level.

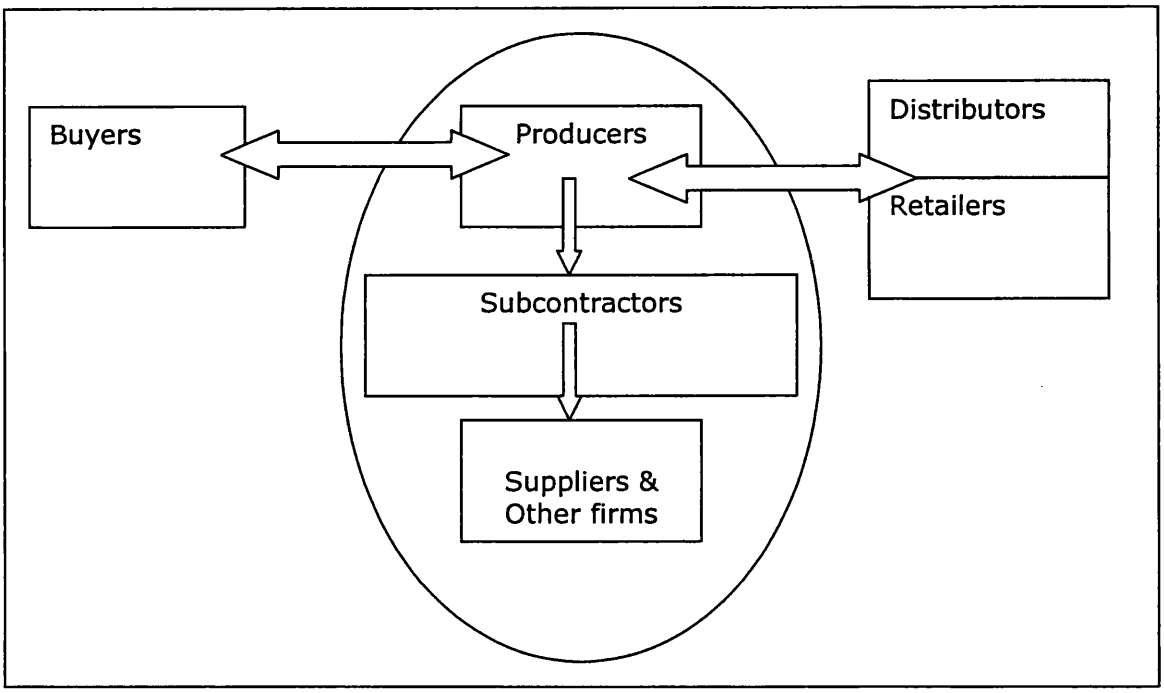
8.1.2 Forward linkages

As for forward linkages, in Montebelluna geographical proximity does not seem to be a crucial factor, as the majority of buyers of sample firms are located outside the district. Overall, the producer-buyer relationship seems to be very tight, in terms of its length (9.85 years on average), its nature (mainly social) and level of cooperation but it is not based on geographical proximity (836.69 miles on average). Cooperation with buyers in relation to the local market is mainly

based on setting product specifications, exchange of information and experience and quality control. Cooperation with buyers for export also relies on these three features, but less cooperation takes place in terms of setting product specifications and quality control. This could reflect the different requirements that both local markets and international markets demand: whereas production for local market embodies higher quality concerns and higher technological content, production for international markets is characterised by lower quality and lower technological content.

Forward linkages do not tend to be developed in geographical proximity, but rather developed nationally and internationally. Buyers not only provide valuable information on foreign markets but they also act as global trendsetters by spreading internationally cheaper imitations of designer shoes that are produced for a different market segment. When asked about the most valuable sources of information for district firms in relation to foreign markets, distributors and retailers seem to play a crucial role, with retailers providing more reliable information than distributors. The following figure displays a visual representation of this process. The circle identifies the imaginary boundaries of the industrial district:

Figure 8.2: The role of forward linkages



Buyers in this sense can promote the districts' competitiveness in two main ways: either imitating a prototype that has been designed for a niche market, but promoting it more widely outside the districts by selling it at a lower price (what Gereffi in 1999 has termed "buyer-driven chain); or by providing accurate information, especially on foreign markets since retailers are in closer contact with the final customers and they have a more in-depth knowledge of their preferences and their purchasing power. Overall, buyers, distributors and retailers all provide that extra-district networking activity that is necessary to sustain the competitiveness of the district by providing critical information that is necessary to keep up with sectoral trends or with a volatile demand.

In this sense, as discussed in Chapter III, section 3.4.3 forward embedded linkages regardless of their geographical proximity are still associated with distinctive mechanisms of coordination: the presence of trust that characterise the social relations discourages opportunisms and makes information widely available; firms tend to share fine-grained information (e.g. providing accurate information

on prototypes and foreign markets) and they engage in joint problem solving activities (e.g. setting product specifications and quality controls).

Conversely, in Northampton geographical proximity seems a crucial factor as the majority of buyers seem to be local. Overall, the producer-buyer relationship seems to be quite loose, in terms of its length (5.98 years on average), its nature (mainly business) and low level of cooperation, however it is based on geographical proximity (111.8 miles on average). Cooperation with buyers in relation to the local market is mainly based on negotiation of payments and delivery conditions. This could be a tangible sign of the difficult climate that the district is facing. Cooperation with buyers for export seems to be more pronounced as the firms display a fairly similar attitude towards, for example, exchanging information and experience and the organisation of production. This could be explained by the fact that exports are very important for all the district firms since for most of them, exports represent between 50% and 80% of the production (Interview with one of the key informant).

When the interviewees were prompted about the most valuable sources of information for district firms in relation to foreign markets, some mentioned an initiative promoted by a local institution which aims to encourage local firms to make the best possible use of the international business opportunities available. In this sense, the close geographical proximity with buyers prevents the district from engaging in the extra-district networking activity that is necessary to keep up with international competition. This geographical proximity in a way seems to undermine the existing cooperation: firms tend to cooperate for export, but the outcome of this collective effort is undermined by the very cohesive knowledge base that all firms are likely to possess through exposure to the same business context. This

does not leave any significant room for external input in terms of critical information either on sectoral trends, innovation or distant markets.

As for the different degrees of embeddedness, the following table compares the different degrees of embeddedness of the linkages with buyers for both industrial districts in relation to the different factors considered. Data on geographical distance, length of the relationship and its nature was gathered through the questionnaire, while the semi-structured interviews provided some additional insights on the mechanisms of coordination.

Table 8.2: Embeddedness of forward linkages

District	Embeddedness			
	Geograph.	Length	Social Nature	Mechanism of Coordination
Montebelluna	No	Yes	Yes	Trust Fine-grained information transfer Joint problem solving activities
Northampton	Yes	No	No	Local institutions

From the comparison of the forward linkages, it emerges that the two industrial districts clearly display different degrees of embeddedness. From the interviews, it emerges that the districts rely on two different mechanisms of coordination: where in Montebelluna firms rely on trust, fine-grained information transfers and joint problem-solving activities, in Northampton firms mostly rely on local institutions.

These different mechanisms of coordination are associated with different benefits and different levels of transaction costs.

The presence of trust that characterises the social relations in Montebelluna seems to foster a distinctive way of learning in relation to foreign market and fashion trends: by relying on informal contact with buyers, distributors and retailers manufacturers to acquire critical information to keep up with increasing competition. By relying on an informal mechanism of coordination, district firms incur lower transaction costs than those firms that rely on more formal mechanisms of coordination such as attending initiatives promoted by the local institutions.

In this sense, the findings support the hypothesis outlined by the literature discussed in Chapter III section 3.4.3, according to which embeddedness is associated with coordination mechanisms, such as trust, fine-grained information transfers and joint problem-solving arrangements which in this case facilitates economic action.

8.1.3 Horizontal linkages

In Montebelluna, despite firms seeming very willing to cooperate with other local producers and competitors, and more than happy to lend machinery to other firms, no direct cooperation takes place with competitors regarding the organisation of production. In this sense, the findings contradict the assumption widely endorsed by the literature on industrial districts and described in Chapter III, according to which cooperation amongst competitors occurs in relation to production. Some cooperation occurs, but it mainly concerns lending machinery and exchanging information and experience. Although the majority of the interviewees do not value the local cooperation-oriented initiatives amongst competitors, they

do attend local meetings and business events in order to nurture their social relationships and to show social responsibility.

Furthermore, according to the firms interviewed, monitoring competitors plays a crucial role in achieving competitive advantage. Nearly all the firms had samples of their competitors. Respondents estimate that imitation along with the widespread diffusion of information have an overall positive impact on the district as a whole because it exerts pressure on leader firms to stay competitive.

Similarly, in Northampton, no direct cooperation takes place with competitors regarding the organisation of production. Cooperation with competitors is almost non-existent and it is only partially based on limited exchange of information and experience and joint labour training. However, the district is engaged in a joint marketing initiative: the Goodyear Welted seal. In this sense, the findings contradict the assumption widely endorsed by the literature on industrial districts and described in Chapter III, according to which cooperation in relation to production with competitors occurs.

Overall, by looking at the similar experiences of both Montebelluna and Northampton in terms of horizontal linkages, cooperation amongst competitors does not play any major role in determining their viability. Conversely, the level of competition amongst competitors seems to be a function of the availability of critical information within industrial districts: as critical information becomes publicly available, it exerts pressure on leader firms to stay competitive. As the result of leader firms becoming more competitive, the whole district is "pushed" forward.

8.1.4 Linkages with other organisations

In Montebelluna nearly all the respondents have strong connections with industry-based associations, mainly with the local employers' association, the trade association and the technology centre. Interestingly only a small minority of the respondents who have contact with the technology centre think that the relationship is very relevant to their business. Technological expertise is in fact mainly provided by suppliers of technology such as suppliers of machinery and by exhibitions and specialised trade fairs.

Similarly in Northampton nearly all the respondents have strong connections with industry-based associations. Technological expertise is however only marginally provided by suppliers. In particular there are few linkages with specialised suppliers and the district has recently lost its last machinery producer. Overall, according to the respondents the district is lagging behind in terms of innovation: there is a need to encourage innovation to ensure that the local industry makes best use of new technology and e-commerce. As for relationships with commercial associations, both Montebelluna and Northampton display similar attitudes with respondents tending to rely mostly on professional events services and consultants. These actors in particular are often seen as key network facilitators, providing support for firm survival and development. In particular, accountants and solicitors are the most likely consultants to be used as sources of advice by the respondents.

As for relationships with government-supported associations, respondents in Montebelluna tend to rely on firm advisors and Training Enterprise Councils but they rate these contacts as not being very relevant to their business activities. In Northampton the situation is quite different as none of the respondents have any contact with Training Enterprise Councils and only half of the firms

have contact with firm advisors, but they rate these contacts quite low in relevancy to their activities. In both districts, only a small proportion of the firms have direct contact with both training centres and universities. In both districts, quite surprisingly none of the respondents have any contact with special interest associations such as environmental associations or political parties. In Montebelluna, none of the firms is engaged in any relationships with community-based associations, while in Northampton respondents tend to be more active and participate in both parents/schools groups as well as charity groups and round tables. As for social organisations, respondents in Montebelluna take part in both sports clubs and working clubs while the Northampton respondents only participate in sports clubs.

As for linkages with other organisations, quite similar patterns are displayed by both Montebelluna and Northampton. However, concerning relationships with the different local institutions, the perceptions of the relevance of these relationships to the business tend to vary. While in Montebelluna there is a more positive perception of the different initiatives undertaken by the institutions, in Northampton respondents tend to be either less informed or more sceptical about their possible benefits. In particular, as a result of the recent decline, the district is experiencing a shortage of skilled workers as well as managerial staff. In this sense the findings support Garofoli's argument discussed in Chapter III section 3.3.2, according to which the competitiveness of the district is hindered by a lack of skilled labour force (Garofoli, 1982).

8.1.5 Summary

Overall it emerges from the findings that, as discussed in Chapter VI, the governance of the district in Montebelluna has not relied on few "technological gate-keepers" that were able to absorb external

knowledge but on large leading-firms (either local or foreign, independent firms or MNCs) that were able to provide critical knowledge, and also small firms. In this sense, the findings confirm the presence of several firms - suppliers of components, buyers and retailers - that all provide extra-district networks as well as valuable information in relation to sectoral trends, technological innovation and foreign markets. In contrast, in Northampton, while extra-district networks are provided by suppliers of materials that are non-local, they do not provide critical information either on sectoral trends or technological innovation that would be necessary to keep the district up to speed with competition. A small minority of the respondents think that their main source of information is their suppliers. Critical information is mainly provided by local institutions such as FLAG or BLC Leather Technology rather than backward, forward or horizontal linkages. More precisely, the findings outline a contradiction in Northampton: while many respondents indicate that local institutions are a valuable source of critical information in relation to distant markets, sectoral trends and technological innovation, when prompted to assess their relevance to their business, respondents rate it as very low. This raises the question of the extent of the real effectiveness of local policy intervention if the respondents do not perceive the benefits. This issue will be more thoroughly discussed in section 8.2.5 when discussing the policy implications.

Table 8.3 summarises the different linkages: whether they are embedded by considering their social dimension and their length, if they provide extra-district networks according to their degree of geographical proximity, the three different mechanisms of coordination that are associated with them. The findings indicate that there are a number of networks where an industrial district may cooperate, through a variety of linkages which will assist the district to be globally competitive. In this sense, according to the literature

ble 8.3: Embedded relations and their outcomes

	Embedded relations	Extra-district networks	Trust	Thick information	Joint problem solving arrangements
ntebelluna					
ckward Linkages					
ppliers of machinery	Yes	No	Yes	Technical expertise	Joint product development Quality improvement
ppliers of material	Yes	No	Yes	No	
ppliers of components	Yes	Yes	Reputation	Sectoral trends Innovation	
bcontractors	Yes	Yes	Yes	No	Setting product specifications Quality control
rward linkages					
yers	Yes	Yes	Yes	Foreign markets	Setting product specifications Quality controls
tributors	Yes	Yes	Yes	Foreign markets	No
tailers	Yes	Yes	Yes	Foreign markets	No
rthampton					
ckward Linkages					
ppliers of machinery	No	No	No	No	No
ppliers of material	No	Yes	No	No	Inconsistent
ppliers of components	No	No	No	No	Inconsistent
bcontractors	No	No	Yes	No	Quality controls Setting product specifications
rward linkages					
yers	No	Yes	No	No	Payment and delivery conditions
tributors	No	Yes	No	No	No
tailers	No	Yes	No	No	No

discussed in Chapter III section 3.4.3 the findings support the hypothesis that embeddedness in a variety of forms does have an impact on competitiveness. This issue will be more thoroughly discussed in section 8.2.3 when discussing the districts' network structure.

From the findings, it is clear that both geographical proximity and the social dimension play an ambiguous role for sustaining the viability of the districts. Geographical proximity plays a beneficial role in terms of backward linkages, especially by allowing manufacturers to engage in face-to-face relationships with subcontractors, maintaining stable and continuous linkages with them and exerting a strict control over their work. However, geographical proximity is not beneficial for forward linkages. As the experience of Montebelluna proves – by engaging in extra-district networks with distant buyers, distributors and retailers, the district is able to acquire critical information especially in relation to sectoral trends in foreign markets.

As for the social dimension, it is clear from the findings that the level of embeddedness associated with these linkages overall facilitates economic action by allowing the transfer of critical information through mechanisms of coordination, such as trust, fine-grained information transfer and joint problem solving arrangements. This is particularly evident in relation to Northampton's backward linkages where, although suppliers of material are non-local and could provide extra-district networks, the absence of the social dimension seems to hinder their potential value: as a matter of fact, the extra-district networks do not provide critical information.

8.2 Main findings and their implications

8.2.1 Broad domain

Research question: How do industrial districts deal with the dramatic changes in their competitive environment?

Research objective: To establish the resilience of industrial districts as organisational forms of production that rely on strong networks developed over time, in geographical proximity in an era of globalisation.

By taking into account the differences displayed by the districts in relation to their industrial structure as previously discussed in Chapter VI, section 6.6, the dynamic evolution of the two districts depends upon the external incentives derived from technology and technological change, as well as sectoral trends that have been endorsed by different endogenous responses. In this sense, the findings support the literature according to which the adoption of technology and sectoral trends are crucial factors in determining industrial districts' viability, although these external incentives need to be considered in relation to the contextual endogenous responses. Only by looking at both exogenous and endogenous causes of change in combination we can assess industrial districts' viability.

At the sector level of analysis, where Montebelluna has sustained its competitiveness over time through diversification and imitative innovation, Northampton has deepened its specialisation by reducing its product range. The continuous product diversification – a peculiar feature of the Montebelluna's district – has deeply affected the physiognomy of this district. In line with several studies that were

discussed in Chapter III section 3.3, it emerges that the introduction of innovations that have determined the evolution of the district calls for the presence of pioneering leading firms (Lazerson & Lorenzoni, 1999). In this sense, the early developments of the industrial structure of Montebelluna recalls the "hub-and-spoke" industrial district identified by Markusen (1996). Conversely, the evolution of Northampton seemed to be less dynamic as it was maintained by its historical path dependence that has locked the district into a certain pattern of specialisation. In this sense, the evolution of Northampton recalls the traditional industrial district in its Marshallian connotation (Lazerson & Lorenzoni, 1999). The shoe making companies that thrive in Northampton today still continue the tradition of making quality men's footwear, for which the area has been famous since medieval times.

In terms of sectoral trends, by following different patterns of industrial development, both industrial districts have undertaken very different strategies by establishing themselves in very different niches of the market. This same market positioning is particularly significant as the niches themselves embody different opportunities for both market consolidation and market expansion. In addition, these different strategies, implemented to deal with sectoral trends, have also been coupled by different outsourcing strategies: Montebelluna appears to be "a node in global networks" (Amin & Thrift, 1992) while Northampton's participation to the global production chain is limited to a few large companies operating in the low segments of the market.

In this context the experience of Montebelluna seems to more closely resemble Vernon's later model that was discussed in Chapter II according to which labour intensive and low value stages of production process are outsourced whilst the high-value, capital

intensive ones are still kept in the country of origin (Vernon, 1979). In contrast, the technological evolution of Northampton seems to support Vernon's earlier model with large firms outsourcing production to developing countries (Vernon, 1966). The same outsourcing strategies implemented by the two districts are underpinned by two extremely different attitudes towards technological innovation. In Montebelluna, entrepreneurs seemed very eager to keep up with technological innovation by the timely adoption of new material and by diversifying their products to match an increasingly volatile demand; whereas Northampton has historically displayed a more resistant attitude towards almost every form of innovation.

At the district level of analysis the physiognomy of the network structure has important implications for both adaptive efficiency and the competitive advantage of its constituent firms. In particular, the presence of extra-district networks is particularly important for the viability of industrial districts. Drawing on the different experiences of Montebelluna and Northampton, the findings show how "opening up" internationally is beneficial and it mainly occurs through several mechanisms:

1) Some of the larger district firms become transnational or global corporations and take the role of leading firms in the industrial district;
2) MNCs acquire existing district firms or set up new subsidiaries or local branches;
3) Small and medium sized firms operating in the final market or as suppliers or subcontractors take independent paths of internationalisation.

4) Local institutions develop programmes encouraging the internationalisation and competitive evolution of industrial districts.

As the different experiences of Montebelluna and Northampton demonstrate, not all the above actors involved in the internationalisation process are to be found in every industrial district. Moreover, the relationships among these actors may vary from district to district.

In Montebelluna, both foreign and domestic firms are exploring the new frontiers of the global economy and their international experience is beneficial for the district as a whole. The presence of local leading firms and the investments made in the district by MNCs has not disrupted the pre-existing industrial structure but has actually enhanced it by providing valuable extra-district networks. In this sense the findings in Montebelluna support Birkinshaw's contention that was discussed in Chapter III section 3.3.3, according to which in mature industries, foreign ownership is mostly positive for local firms (Birkinshaw, 2000). In contrast, in Northampton the more recent acquisition of Church & Co. footwear by the Prada Group does not seem to have brought any substantial benefit to the district. In this sense, the findings in Northampton support Birkinshaw's contention that clusters displaying low dynamism but operating in a mature industry receive foreign investment with some ambivalence (Birkinshaw, 2000). In the case under investigation for instance, the findings suggest that the district does not benefit from the presence of foreign investment because the linkages between the foreign firm and local firms do not involve any technology transfer or access to the investing company's global presence.

In addition, drawing on the taxonomy distinguishing between industrial district type I (i.e. Northampton) and industrial district type II (i.e. Montebelluna) the evidence suggests that different degrees of embeddedness tend to be associated with different mechanisms of coordination, which in turn imply different transaction costs. This leads us to assume that different degrees of embeddedness have important implications for the adaptive efficiency of the district as a whole and for the competitive advantage of its constituent firms by facilitating or hindering their competitiveness. This issue will be more thoroughly discussed in the following sections when dealing with the three main levels of analysis: the sector, the industrial district and the firm.

8.2.2 The sector

Research Question: Are industrial districts a viable strategy for small manufacturing firms to compete globally?

Research Objective: To establish under what conditions a relatively traditional sector of industry can still survive and prosper in spite of global competition.

In Chapter VI it was explained how some concomitant challenges - namely global competition, dynamic volatility and increasing market segmentations - represent a threat as well as an opportunity for the footwear industry worldwide and particularly for industrial districts and their constituent firms. In order to understand the conditions in which a relatively traditional sector of industry can still survive and prosper in spite of global competition, it seems useful to briefly summarise how the two industrial districts under investigation are respectively dealing with these challenges.

A) Global competition

Globalisation clearly modifies the competitive environment of industrial districts, but also reshapes the borders of their networks forcing industrial districts to rethink their strategic positioning in the global value chain.

One of the most visible effects of globalisation is the international fragmentation of production processes: the splitting of production processes over production sites located in different countries as a cost reducing strategy. Fragmentation allows producers to take advantage of differences in factor prices among countries, thereby obtaining a reduction in costs by setting up an international production network. According to the literature, many countries are very interested by this phenomenon, mainly those who specialise in traditional manufacturing sectors or "mature industries" such as textiles, clothing, apparel, furniture, leather goods and footwear. This is due to increasing competitive pressures from low labour-cost producers in emerging countries. Overall this trend is decreasing the range of activities carried out within industrial districts. Consequently as firms in industrial districts enter into the global value chain, they are altering their traditional sources of competitiveness, historically coming from relationships amongst district firms.

Whereas the experience of Northampton clearly supports this scenario depicted by Vernon's earlier theory (1966), Montebelluna defies it by more closely resembling his later interpretation (Vernon, 1979). From the comparative study, it clearly emerges that Montebelluna plays a more active role in the global value chain than Northampton. In both the industrial districts under investigation, the respondents follow a common pattern in their outsourcing strategy: they outsource those phases of production that are highly labour intensive but represent low-value added activities, while they tend to

keep in-house some of the most profitable links of the value chain. In Montebelluna this practice has been endorsed by firms, regardless of their size, that increasingly tend to outsource these phases abroad. However, in Northampton, delocalisation of production is not extensive and it is still mainly carried out by large firms at local level. Only a few large firms, mostly operating in the low segments of the market, have started outsourcing abroad. This feature not only suggests a lower degree of involvement of the district in the global value chain, but it also suggests that those manufacturers operating in relatively low segments of the market face very strong competitive pressure from emerging countries.

In this sense, the delocalisation of production activities abroad has not altered intra-firm relationships in Montebelluna, while in Northampton it has further exacerbated the gradual weakening of backward linkages. Drawing on the different experiences of Montebelluna and Northampton, the findings show that two particular mechanisms of subcontracting seem to be relevant to the viability of the districts:

1) Inward subcontracting when industrial districts firms receive global activities from outside (localisation of MNCs, acquisition of local firms from foreign firms or agreements for subcontracting for external firms). In this case we are witnessing a more passive form of internationalisation, but it could still be beneficial for the districts since inward subcontracting can still provide the extra-network linkages necessary for the district to acquire valuable information on innovation, sectoral trends or foreign markets.

2) Outward subcontracting when industrial districts delocalise some stages of their production (or the entire production as in the case of offshoring) abroad. The district experiences a more active form of

internationalisation which is governed by the district firms in several ways. Generally this process is governed by strategic actors of the districts: leader firms (either large or small) and specialised suppliers. Local institutions can also provide support for firms to engage in outward subcontracting.

As the different experiences of Montebelluna and Northampton prove, not all the above actors involved in the internationalisation process are to be found in every industrial district. In Northampton, only large firms operating in the low segment of the market are involved in subcontracting, while in Montebelluna small firms such as specialised suppliers are also engaged in subcontracting activities to foreign countries. In particular, as was explained in Chapter VI, in Montebelluna this decentralisation of low-value-added activities to foreign subcontractors can be interpreted as a form of functional upgrading where lower value activities are externalised while high-valued-added stages are maintained inside the district. A similar pattern of decentralisation occurs in Northampton where large manufacturers in the low segments of the market outsource low-value-added activities to both foreign and local firms.

Although outward subcontracting can been seen as a more active form of internationalisation, this practice is not necessarily beneficial for industrial districts. In the case of Montebelluna, outsourcing outside the district has not altered the endogenous dynamism of the district, while in Northampton the concomitant decrease of inward outsourcing along with the increase of outward outsourcing initiated by large firms has deprived the district of that intra-district trade flows that are necessary to sustain its endogenous growth. This suggests that districts where the vast majority of firms operate in the low value segments of the market do face strong competitive pressure from cheaper labour countries. As a result these districts will

increasingly displace their production process to other countries. In this respect upgrading strategies are urgently needed to increase their competitiveness in both domestic and foreign markets and to counterbalance the inevitable trend towards employment reduction at district level.

B) Dynamic volatility

As was explained in Chapter VI, dynamic fashion trends are causing styles to change on a monthly, even weekly basis and savvy customers are demanding high quality, in smaller quantities, at lower prices and in less time. This dynamic volatility is steadily eroding margins and making it extremely difficult for local producers to compete effectively. From the comparison of the historical developments of the two industrial districts it clearly emerges that Montebelluna has been more flexible in facing dramatic changes in its competitive environment. The findings indicate that this flexibility is the outcome of the extensive diversification undertaken by the district. Such diversification has been made possible by the timely adoption of technological innovation by means of strong backward linkages as well as extra-district networks.

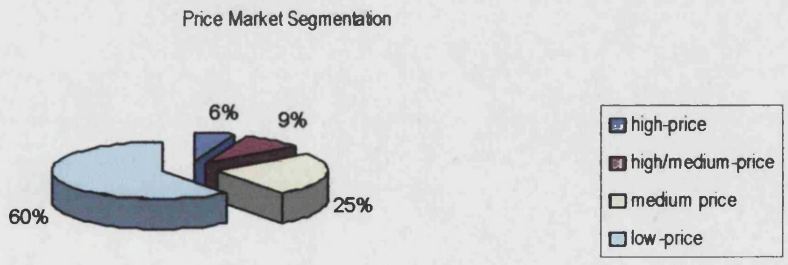
In Montebelluna, from the early origins of the district until today, the district has mainly developed through imitative innovation and by diversification. The continuous product diversification – a peculiar feature of the Montebelluna district – has deeply affected the physiognomy of this district by forging openness and flexibility. Conversely, the evolution of Northampton seems to be more rigid. The shoe making companies that thrive in Northampton today still continue the tradition of making quality men's footwear, for which the area has been famous since medieval times. If on the one hand, the versatility of this method has provided short-term flexibility by enabling the industry to respond to export demand for the crafted quality footwear; on the other hand, in the long-term the deepening

of specialisation has left no room for substantial innovation to be introduced and has exacerbated the division between large and small firms. Today, whereas Montebelluna is consolidating its position as "sport-system district" and as a shoe manufacturing centre of world importance, Northampton is increasingly moving its traditional industrial base from footwear manufacturing to more highly intensive knowledge sectors such as business and financial services.

A) Segmentation of the market

By following different patterns of evolution both industrial districts have undertaken different strategies by establishing themselves in very different niches of the market. It was mentioned how this same market positioning is particularly significant, as the niches themselves embody different opportunities for both market consolidation and market expansion. In terms of price range, in Montebelluna the majority of firms produce shoes for the medium-high segment while a small minority produce for the high segment of the market. In Northampton, however, the respondents tend to target the other two extremes of the range, namely the high and low segments. As for market consolidation, if we take into account the different market shares in year 2000 as they were presented in Chapter VI when discussing global trends affecting the sector, it emerges that by targeting different niches the two industrial districts expose themselves to different levels of price-based competition.

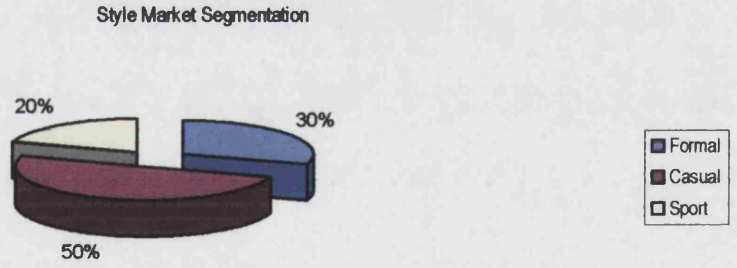
Figure 8.3: Price Market Segmentation



(Source: Pambianco, 2000)

In this respect, by competing on a narrower share of the market, Montebelluna seems to expose itself less than Northampton to price-based competition. As for market expansion, according to global sectoral trends, since the footwear market sees a significant widening of its higher and lower ranges alongside a consequential restriction of its medium ranges, both industrial districts are targeting expanding market niches. In terms of style, Montebelluna's main product is sport and casual shoes while Northampton relies mostly on the production of formal shoes. This also has important implications, both for market consolidation and market expansion. As for market consolidation, by targeting the sport and casual shoes niche, Montebelluna is exposing itself to a stronger quality-based competition than Northampton. As for market expansion, since formal and sport shoe is gradually being replaced by casual footwear, Montebelluna finds itself in a more promising niche of the market than Northampton.

Figure 8.4: Style Market Segmentation



(Source: Pambianco, 2000)

Overall, the evidence shows that the different competitive strategies undertaken by the two industrial districts in relation to both market positioning and their position in the value chain seem to have important implications for their adaptive efficiency. As for Northampton, facing a very strong price-based competition mainly

from cheap labour countries, shoe manufacturers in the low segments of the market try to react by increasingly delocalising some of the phases of the production abroad. Nevertheless, international delocalisation as a strategy to reduce production costs is not sufficient to counterbalance competition from low cost producers in developing countries. As a result, the district displays a strong reduction in employment and the number of firms, ultimately leading to decline.

Conversely in Montebelluna, shoe manufacturers in the high segment of the market tend to outsource relatively less as a cost reducing strategy. In this case, the decentralisation of low-value-added stages of production (e.g. assembling) to foreign subcontractors can be seen as a form of functional upgrading since lower-value-added stages are decentralised while higher-added-value phases are kept inside the district.

8.2.3 The industrial district: network structure

Research Question: How do global forces shape industrial districts in different ways?

Research Objective: To provide a more profound understanding of the factors underpinning the economic dynamism of industrial districts.

From the analysis of the two industrial districts under investigation we can make the following general propositions:

1) Some leader firms are always present in those districts where the international opening up process has developed the most. In this sense the divergent experience of Montebelluna where a wide variety of actors is involved in the "opening up" process

starkly contrasts with Northampton, where only few actors are involved in the internationalisation process.

2) In order to assess the benefits associated with the internationalisation process of the district, it must be determined whether the leader firms are acting alone (as in the case of Northampton) or whether they are part of a more complex and articulated process of global exploration.
3) It is more likely that the district in which leader firms open up the district to the global economy by involving other local firms (subcontractors, suppliers and competitors) will display higher adaptive efficiency than those districts where internationalisation is limited to a few companies.
4) Since the strategies of leader firms are the main means by which the district can open up to the outside environment, policy intervention is needed when leader firms tend toward exclusivity. This occurs when the participation of leader firms in the global production chain does not generate any benefits, either direct or indirect (i.e. spillovers) for the rest of the district firms. This could be due to several reasons. Drawing on the experience of Northampton described in both Chapter VI and Chapter VII, for instance, three factors seem particularly relevant: lack of intra-district trade-flows between leading firms and the other district firms; large leading firms have faced global competition by delocalising activities abroad that traditionally sustained other district firms in the past; large leading firms were forced to restructure by internationalising some of the best district resources (e.g. skilled labour).

In addition, besides the opening up of the district and the presence of critical actors such as leading firms and "gate-keepers of knowledge", another feature seems to be relevant to assess their viability. More precisely, as discussed in Chapter III section 3.4, the review of the

literature reveals considerable ambiguity regarding network structure. Even though there was an explicit consensus that economic activities in industrial districts are embedded (to a different extent) in strong networks of social relationships among individuals, firms and other organisations, the implications of such embeddedness for industrial districts remains ambiguous. Embedded networks, arising from repeated, trust-based relationships that have developed over time in geographical proximity, were thought to be likely to bring sustainable competitive advantages to both constituent firms and the district as a whole. In this sense it was assumed that embedded networks would sustain the topological stability of the district by allowing prompt and effective readjustments to the dramatic changes in the district's competitive environment. Conversely it was assumed that as industrial districts operate through embedded networks which promote competitive collective and individual performances, at the same time, embedded networks can also derail adaptive efficiency by several mechanisms.

Bearing in mind the differences displayed by the districts in relation to their industrial structure discussed in Chapter VI section 6.6, the comparison between Northampton and Montebelluna is useful to illustrate how network structures can enhance or derail the adaptive efficiency of the district. Drawing on the taxonomy previously introduced, according to which Montebelluna aligns best with industrial districts type II and Northampton with type I, the evidence shows how different degrees of embeddedness are associated with different mechanisms of coordination which in turn imply different transaction costs. This leads us to assume that - *ceteris paribus* - different degrees of embeddedness have important implications for the adaptive efficiency of the district as a whole. More precisely, if we compare for instance, the different levels of embeddedness of backward linkages displayed by respondents in both industrial

districts: Montebelluna displays an higher level of embeddedness than Northampton in relation to all the three factors considered (geographical proximity, length of relationships and social nature).

Table 8.4: Embeddedness of backward linkages

District	Embeddedness			
	Geograph.	Length	Social Nature	Mechanism of Coordination
Montebelluna	Yes	Yes	Yes	Trust Fine-grained information transfer Joint problem solving activities
Northampton	No	No	No	Local institutions

If we now consider the different levels of embeddedness of forward linkages displayed by respondents in both industrial districts: Montebelluna displays an higher level of embeddedness than Northampton in relation only to two out of the three factors considered (length of relationships and social nature).

Table 8.5: Embeddedness of forward linkages

District	Embeddedness			
	Geograph.	Length	Social Nature	Mechanism of Coordination
Montebelluna	No	Yes	Yes	Trust Fine-grained information transfer Joint problem solving activities
Northampton	Yes	No	No	Local institutions

This discrepancy could shed a different light on the implications of geographical proximity. On the one hand, it would be easy to dismiss geographical proximity as a factor of decreasing importance as a result of globalisation; on the other hand, a more thorough analysis could suggest different considerations. Particular attention should be paid to the geographical proximity of both backward and forward linkages as they seem to play a crucial role for the viability of both districts. In Montebelluna for instance, geographically embedded backward linkages allow respondents to engage in problem solving activities with suppliers. Conversely, respondents display geographically disembedded forward linkages. Distant buyers and retailers seem also to provide valuable information as they have a deeper knowledge of the end market. In this context forward linkages provide extra-district networks whose main function is to provide accurate and reliable information on foreign markets with potential great adaptive value.

As the literature review in Chapter III shows, the mainstream industrial district thesis discusses the dynamism of the district only in

relation to its closure – neither external influences nor the presence of outsiders have been contemplated in the scenario. However, external influences such as sectoral trends in the global chain, technological regimes and extra-district networks may have profound consequences on the core activities of the industrial district. In particular, we have seen how the experience of Montebelluna shows that external actors (e.g. distant buyers), by providing resources with potential great adaptive value (e.g. critical information on foreign markets), assume a crucial role in determining the viability of the industrial district. In this respect, the evolution of the district proves that network openness (in terms of extra-district networks and their social dimension) is crucial for Montebelluna's adaptive efficiency and has profound implications for the competitive strategy of the industrial district as a whole and its constituent firms.

Openness to both a wide range of products offered by firms and to different types of companies: within few kilometres and often located on the main road there are multinational corporations, widely known family-run brands, small and middle sized firms as well as subcontractors. Openness towards many foreign companies which especially in the 1990s by acquiring autonomous brands have determined a sort of "skin shedding" in the district but the district has not become an "hollow system". Openness to the correlated industries in the footwear sector has also created a flexible network which is becoming inevitably tied to other sectors. Openness to a trend of international fragmentation of production processes by relocating production stages in developing countries to take advantage of lower labour costs. On the contrary, the continuous deepening of specialisation – a peculiar feature of the evolution of Northampton – has deeply affected the physiognomy of this district by forging closure: in terms of a limited range of products offered by very similar types of companies. As one of the key informants

pointed out *'they all produce pretty similar things - some products are more up-market, some more fashionable, some others are better value for money, but they all are pretty similar to the public at large '* (Interview with one of the key-informants). As for the limited heterogeneity of the firms, within the district there are still very few multinational corporations and the main bulk of the district firms mostly consists of family-run small and middle sized firms that often work as independent manufacturers as well as subcontractors. Only in very recent times has the district started experiencing acquisitions of local firms by foreign world-renowned luxury goods companies.

Overall, it emerges that higher levels of cooperation (i.e. exchanging information and experience) are always associated with relationships that have been developed over time and possess a social connotation. In this context, an open network structure made up of stable linkages of a socio-economic nature can be seen as a competence-enhancing capability for the district: by relying on stable socio-economic networks (regardless of their geographical proximity), the district seems more flexible when dealing with global competition, dynamic volatility and progressive market segmentation. In this sense, it emerges that an open network structure made of stable socio-economic networks is more conducive to adaptive efficiency.

8.2.4 The firm: relational asset

Research Question: Is the relational asset of the firm still a source of competitive advantage?

Research Question: To provide a theoretically integrated statement of relational asset of the firm and a systematic analysis of the conditions under which it may lead to competitive advantage for the single firm.

Drawing on the different experiences of Montebelluna and Northampton, we identified several firms that sustain the viability of industrial districts: some of the larger district firms become transnational or global corporations and take the role of leading firms in the industrial district; MNCs acquire existing district firms or set up new subsidiaries or local branches; small and medium sized firms operating in the final market or as suppliers or subcontractors take independent path of internationalisation; "gate-keepers of knowledge" acquire critical information.

In particular the role of the latter is particularly crucial for the provision of critical information such as information about sectoral trends, innovation, technological expertise and distant markets. In this sense, the role of "gate-keepers of knowledge" may be undertaken by different actors ranging from large district firms (either local firms or MNCs) to small and medium sized firms operating in the final market or as suppliers or subcontractors. "Gate-keepers of knowledge" also generally act as "governors" for the link of the value chain that they belong to: by identifying relevant sources of information, by absorbing the critical information and by spreading it to the other firms. Their ability to integrate knowledge residing both inside and outside the firm's boundaries emerges as a distinctive

organisational capability. In particular by looking at the relational assets of the gate-keepers identified in our comparison (i.e. the suppliers of components in Montebelluna), the findings indicate that acquiring and spreading critical knowledge often occur in relation to informal contacts.

Overall, comparing the different kinds of linkages under investigation it emerges that the acquisition of critical information is always associated with relationships that have been developed over time and possess a social connotation. In this context the firm's networking strategy can be seen as a competence-enhancing capability: by developing stable relationships of a socio-economic nature with other firms (regardless of their geographical proximity), the firm seeks to gain access to or exert control over scarce resources (e.g. critical information). This has long-term profitability implications for the firm and thus a networking strategy can be seen as a competitive strategy that may lead to sustainable advantage for the single firm, as well for the adaptive efficiency of the district as a whole.

In Montebelluna for instance, by engaging in stable relationships of a social nature with suppliers of components, smaller firms gain access to a pool of information concerning novelties and improvements (Uzzi's "thicker information") which will be otherwise inaccessible to them. Similarly, by engaging in stable relationships of a social nature with subcontractors, leader firms promote and increase their competitiveness, allowing them to become more specialised and to extend their market share outside the district. By also establishing stable relationships of a social nature with buyers, district firms access valuable information on foreign markets as retailers provide more accurate information than distributors.

Furthermore, the different experiences of Montebelluna and Northampton prove that "gate-keepers of knowledge", especially in the case of leading firms, may have the "abilities" to identify relevant sources of information and acquire critical information but they may not have the "willingness" to share it with the other district firms. This is often the case when relationships tend to be asymmetric: one of the two partners, most commonly the most powerful one, may be reluctant to release its knowledge. In our case, supposing that leader firms are the most powerful ones, they may resist "trading" their knowledge if they regard other local firms unlikely unable to return useful knowledge or any other benefits.

Finally, as the traditional literature on industrial districts indicates, flows of critical information are mainly bounded by the geographical extension of the district. The findings in this sense indicate that critical knowledge concerning innovation, sectoral trends or distant markets are often rather provided by extra-district networks.

8.2.5 Policy implications

By discussing sectoral trends, we have seen how in some countries such as Britain, increasing imports has played a very important role and domestic employment has declined sharply. Elsewhere in Italy for example, domestic output and employment have been maintained. In Italy, increasing competitive pressure from emerging low-wage countries forced the domestic footwear sector to diversify its production by increasing its specialisation in high quality goods, which do not compete directly with low quality goods from emerging countries. On the contrary, Britain has relied heavily on protectionism in the past and only recently has it undertaken a similar pathway - a remarkable process of restructuring by increasingly employing skilled labour in the attempt to upgrade its production and to concentrate upon specialised products and design-intensive activities. By drawing

on the diversity of these experiences it emerges how it is becoming increasingly difficult for governments to justify and sustain over time any form of protectionism towards domestic industries, especially in light of the gradual expansion of different trade blocks such China's accession to the WTO or the enlargement of the EU. In this sense, the findings confirm that the adoption of different trade regimes has implications for the viability of industrial districts.

Furthermore, as it was shown in Chapter VI section 6.5.1, in Montebelluna the volume of production, import and export have started to decline from 1980 onwards. This could suggest that even Montebelluna despite of a looser protectionist policy may not be able to withstand the pressure from low cost manufacturing countries for long. From here we can infer the importance of local industrial policy to assist the district in the difficult choice of undertaking a suitable upgrading strategy.

At the district level, the findings outline how the upgrading strategies undertaken by the two districts show how their governance was driven by different firms (both small and large sized firms in Montebelluna, mainly large firms in Northampton) and towards different outcomes: the "democratic globalisation" experienced by small firms in Montebelluna starkly contrasts with the "elitist globalisation" experienced by small firms in Northampton. In this sense, industrial policy should address this imbalance by enabling small firms to benefit equally from the process of globalisation. Industrial policy could play a crucial role in helping small firms to reposition themselves along the more profitable links of the value chain. Local institutions should rather promote what has been termed as "institutional thickness" – promote production networks formation and upgrading across the global value chain and the build-up of

public or semi-public goods that might have a significant impact on the value chain. As footwear production networks rely on complementarities, investments made by governments or other local institutions should be aimed at creating or enhancing existing complementarities across firms and industries.

In particular, we have seen how the different experiences of Montebelluna and Northampton prove that "gate-keepers of knowledge", especially in the case of leading firms, may have the "abilities" to identify relevant sources of information and acquire critical information but they may not have the "willingness" to share it with the other district firms. In this context, the role of local institutions is to act as "gate-keepers of knowledge" by providing crucial information that large firms may be unwilling to share. The case of Northampton clearly illustrates this argument.

Similarly, when the establishment of MNCs or other forms of FDI not provide any benefit to the other district firms because they tend toward exclusivity, policy intervention may be needed. This occurs when the participation of leader firms in the global production chain does not generate any benefit, either direct or indirect (i.e. spillovers) on the rest of the district firms. This could be due to several reasons. Drawing on the experience of Northampton for instance, we identified three factors: lack of intra-district trade-flows between leading firms and the other district firms; large leading firms have faced global competition by delocalising activities abroad that traditionally sustained other district firms in the past; large leading firms were forced to restructure by internationalising some of the best district resources (e.g. skilled labour).

In particular, local policy intervention in these cases should be aimed at preserving intra-district trade flows by creating incentives for firms

to reduce outward outsourcing outside the district boundaries or by providing those externalities that the district may be lacking as the result. In the case of Northampton, respondents identify the lack of skilled labour and managerial skills as one of the main pitfalls. The same shortcomings were also acknowledged by one of the key informants who pointed out how some local manufacturers are experiencing difficulties in recruiting experienced operatives. The skilled workforce is diminishing as the industry fails to attract school leavers into footwear manufacturing. As a result there is the need to ensure that the district has access to a skilled workforce by improving the industry's image in the community, schools and higher education.

In addition, the findings outline a significant and remarkable contradiction: while many respondents indicate that local institutions are a valuable source of critical information in relation to distant markets and technological innovation (as opposed to other firms), when prompted to assess their relevance to their business, respondents rate it as very low. This raises the question of the extent of the real effectiveness of local policy intervention if the respondents do not perceive its associated benefits.

Drawing on Chapter II section 2.4, we acknowledged how despite the difficulties in systematically assessing the effective role played by local institutions some generalisations, could be made. In particular, by considering the literature on the most successful industrial districts, the presence of "institutional thickness" was deemed a crucial factor in determining industrial districts' viability. In this sense, the experience of Northampton seems to indicate that the "institutional thickness" displayed by the district does not appear to be adequate to support the traditional footwear district to face "the globalisation challenge": either the initiatives undertaken by the local institutions are ineffective and therefore fail to deliver any substantial

benefit to the district firms or it could be that the effectiveness of such initiatives is undermined by deliberate policy intervention at regional or national level which tend to target more knowledge intensive sectors.

On the one hand, we have seen how several initiatives have been promoted by local institutions, especially by the BFA, in order to boost the profile of the district by increasing firms' awareness in relation to technological innovation, sectoral trends and information on foreign markets, however, the district firms do not seem to benefit from them. On the other hand, we have seen how Northamptonshire is increasingly shifting from its traditional footwear production towards more high knowledge intensive activities such as business and financial services. This issue seems to suggest that while local institutions are still making a considerable effort to raise the competitiveness of the district, industrial policy initiatives undertaken either at regional or national level may be explicitly aimed at increasing the competitiveness of the region in relation to more knowledge intensive sectors.

Overall from the comparative study, it emerges that the extent to which this upgrading will be successful largely depends on the assertiveness of a "joint action" between small firms, larger firms and local institutions. At the firm level, the extent to which this upgrading will be successful largely depends on the assertiveness of a "joint action" between small firms, larger firms and industrial policy. First, small firms need to increase the efficiency of their internal operations such that they are significantly better than those of rivals; second, firms need to enhance both intra-firm and inter-firm linkages to a greater degree than that achieved by competitors, improving cooperation between vertical and horizontal links; third, firms need to introduce new products or improve old ones faster than rivals; finally,

firms need to change the mix of activities conducted within the firm or move the focus of these activities toward a different loop of the value chain. In this sense, properly addressing the balance between the winners and the losers of globalisation is a crucial task for industrial policy.

8.3 The contribution of the present research

These final sections draw together the major findings of the research, reiterating its research questions and its objectives, and summarising the main empirical results as well as stressing their limitations.

We have seen in Chapter II how the ongoing debate on globalisation is increasingly raising the question of whether industrial districts as organisational forms that rely on strong networks, developed over time and in geographical proximity are still playing a role or whether they are destined to fade away (Rabellotti, 1997; Nassimbeni, 2002; Mundim et. al., 2000). In particular, poor performance experienced by some traditional manufacturing districts has been interpreted as a tangible evidence of the strong limits that the industrial districts face when dealing with dramatic change in their competitive environment (Nassimbeni, 2002; Mundim et. al., 2000). To this end, drawing on the literature on globalisation and the "ideal-type" of the industrial district introduced by Rabellotti (1997), four dimensions were deemed as relevant: the spatial dimension placing emphasis on geographical proximity, the political dimension raising the issue of governance, the socio-cultural dimension stressing the importance of relationships that transcend geographical borders and the economic dimension providing threats and opportunities to industrial districts.

In line with the aims of the study, the research had initially a broader focus that became progressively narrower as the research process progressed. Initially, the broad question that the research attempted

to address was the following: how do industrial districts deal with their dramatic changes in their competitive environment? The main objective was to establish the resilience of industrial districts as organisational forms of production that rely on strong networks developed over time in a territorially based proximity in an era of globalisation.

First, in order to address the issue of change (i.e. how industrial districts deal with dramatic change in their competitive environment) by introducing a "workable" definition of the industrial district (and its derived taxonomy) the research focused on their "minimal requirements": a common set of criteria, widely acknowledged by the existing literature, emphasising those structural features that support industrial districts to face the "globalisation challenge".

In this context, the findings indicate that the dynamic evolution of industrial districts depends upon the external influences derived from technology and technological change, as well as sectoral trends that have been endorsed by different endogenous responses. In this sense the findings support the literature according to which the adoption of technology as well as sectoral trends are crucial factors in determining industrial districts' viability, although these external inducements need to be considered in close relation to the contextual endogenous responses.

The "process of adjustment" (i.e. different levels of adaptive efficiency that are displayed by industrial districts) can be explained by using the metaphor of "osmosis" – a process involving passage from one side of a membrane to another. Osmosis as a metaphor means the dissolution of the boundaries between inner and outer, the intermingling of the locality and the world, the integration of local

networks with global networks, the contraposition between localised knowledge and global flows.

The evidence proves that only by looking at both exogenous and endogenous causes of change in close combination can we assess industrial districts' viability. As discussed in Chapter III section 3.3, previous research has often looked at the different sources of change (both endogenous and exogenous) in isolation either by considering sectoral trends (e.g. Schmitz, 2000; Kaplinsky, 2000; Bull et. al., 1993), technological regimes (e.g. Guerrieri & Pietrobelli, 2001), the presence of leader firms (e.g. Lazerson & Lorenzoni, 1999) or technological gatekeepers (Giuliani & Bell, 2005), FDI (Birkinshaw, 2000) and the existence of extra-district networks (Rabellotti, 1997; Humphrey & Schmitz, 2002; Bathelt et. al., 2004; Giuliani, 2005). The findings of the present research differently endorse the idea that these changes are often contextual and need to be looked in close combination in order to shed light on their possible interplay.

In particular, the findings suggest that the physiognomy of the network structure has important implications for both adaptive efficiency and the competitive advantage of its constituent firms. In particular, the presence of extra-district networks is particularly important for the viability of industrial districts. Drawing on the different experiences of Montebelluna and Northampton, the findings show how "opening up" internationally is beneficial and it mainly occurs through several mechanisms:

1) Some of the larger district firms become transnational or global corporations and take the role of leading firms in the industrial district;
2) MNCs acquire existing district firms or set up new subsidiaries or local branches;

3) Small and medium sized firms operating in the final market or as suppliers or subcontractors take independent path of internationalisation.
4) Local institutions develop programmes encouraging the internationalisation and competitive evolution of industrial districts.

As the different experiences of Montebelluna and Northampton prove, not all the above actors involved in the internationalisation process are to be found in every industrial district. Moreover, the relationships among these actors may vary from district to district.

In Montebelluna, for instance, both foreign and domestic firms are exploring the new frontiers of the global economy and their international experience is beneficial for the district as a whole. In this sense the findings in Montebelluna support Birkinshaw's contention that in mature industries, foreign ownership is mostly positive for local firms (Birkinshaw, 2000). In contrast, in Northampton the more recent acquisition of Church & Co. footwear by the Prada Group does not seem to have brought any extra substantial benefit to the district. In this sense, the findings in Northampton support Birkinshaw's contention that clusters displaying low dynamism but operating in a mature industry receive foreign investment with some ambivalence.

In addition, drawing on the taxonomy distinguishing between industrial district type I (i.e. Northampton) and industrial district type II (i.e. Montebelluna) the evidence suggests that different degrees of embeddedness tend to be associated with different mechanisms of coordination which in turn imply different transaction costs. This led us to assume that different degrees of embeddedness have important implications for the adaptive efficiency of the district as a whole and

for the competitive advantage of its constituent firms by facilitating or hindering their competitiveness. Overall, the interplay amongst these variables tend to differ according to three different levels of analysis considered: the sector, the industrial district and the firm.

At the sector level of analysis, the scope of the main research question was further reduced by questioning whether industrial districts are still a viable strategy for small manufacturing firms to compete globally. The main objective was to establish under what conditions a relatively traditional sector of industry can survive and prosper in spite of global competition. In Chapter VI it was explained how some concomitant challenges - namely global competition, dynamic volatility and increasing market segmentation - represent a threat as well as an opportunity for the footwear industry worldwide and for industrial districts and their small firms. In order to understand how a traditional sector of industry can survive and prosper in spite of global competition, the different experiences of Northampton and Montebelluna seem to offer a significant insight which illuminates how the two industrial districts under investigation are respectively dealing with these challenges.

More precisely, given the responsiveness of the European market, and since competing with low-wage countries like China is hardly possible and the sector is still a relatively high protected industry, those countries that have succeeded in exploiting their comparative advantage in relation to quality, design and branding remain strongly competitive on the international market. This leads us to conclude that although the possibility of a sectoral adjustment by producing different and higher quality product has not been contemplated by the HOS model of international trade, it seems to be the only way forward. But to what extent will this strategy be sustainable in the long term?

As it was shown in Chapter VI section 6.5.1, the evidence provided in relation to Montebelluna shows that the volume of production, import and export have started to decline from 1980 onwards. We pointed out earlier that this could suggest that even Montebelluna may not be able to withstand the pressure from low cost manufacturing countries for long.

Outsiders tend to regard emerging countries such as China or India simply on the assumption that are low cost competitors. But if we take China for example, observers begin to notice how some industries are already developing a maturity that many of their Western counterparts took decades to reach. This suggests that producing different and higher quality products will be soon not be enough in order to be globally competitive. However it remains difficult to interpret the consequences of these processes of competitive change (i.e. exogenous change) on the functioning of the industrial districts (i.e. endogenous change) and certainly, what to expect in the near future. Moreover, the different experiences of Montebelluna and Northampton reflect so much variation that there is no reason to believe that all industrial districts will follow a universal development path.

Furthermore, the upgrading strategies undertaken by the two districts show how their governance was driven by different firms (both small and large sized firms in Montebelluna, mainly large firms in Northampton) and towards different outcomes: the "democratic globalisation" experienced by small firms in Montebelluna starkly contrasts with the "elitist globalisation" experienced by small firms in Northampton. In line with the literature, the evidence shows that industrial districts, by delocalising some phases of production abroad, are following different competitive strategies: high quality producers

in Montebelluna who are highly export-oriented outsource less intermediate processing than final assembling, whereas low quality producers in Northampton who mainly produce for the domestic market outsource more intermediate processing than final assembling.

In this sense, the empirical evidence shows how the need to maintain high quality standards in order to be internationally competitive in the high segment of the market strongly affects the delocalisation strategy. The research confirms the assumption that the differences in delocalisation strategies undertaken by Montebelluna and Northampton are related to their market position and to their position in the value chain they belong to: the experience of Montebelluna seems to support Vernon's latest model (1979) that was discussed in Chapter II. In contrast, the technological evolution of Northampton as well as its consequent outsourcing strategy seems to support Vernon's earlier model with large firms, mainly operating in the low segments of the market, outsourcing production to developing countries (Vernon, 1966).

Furthermore, drawing on the different experiences of Montebelluna and Northampton, the findings show that in particular two mechanisms of subcontracting seem relevant to the viability of the districts: inward subcontracting and outward subcontracting. The former is a more active form of internationalisation, while the latter is a more passive form of globalisation. Nonetheless, their impact on the viability of industrial districts is highly contextual, in other words, their outcome will largely depend on several endogenous responses such as the technological evolution of the district (i.e. diversification *versus* specialisation) as well as its market positioning (i.e. targeting different market segments).

At the district level of analysis, the main research question was further narrowed down to how global forces shape industrial districts in different ways. The aim here was to provide a more profound understanding of the factors underpinning the economic dynamism of industrial districts. To this end, in the previous sections some conclusions were reached by comparing the findings of the empirical investigations carried out on network structures in Montebelluna and Northampton. From the analysis of the two industrial districts under investigation we made the following general propositions:

1) Some leader firms are always present, especially in those districts where the international opening up process has been embraced extensively.
2) In order to assess the benefits associated with the internationalisation process of the district, it must be determined whether the leader firms are acting alone or whether they are part of a more complex and articulated process of global exploration.
3) It is more likely that the district in which leader firms open up the district to the global economy by involving other local firms will display higher adaptive efficiency than those districts where internationalisation is limited to a few companies.
4) Since the strategies of leader firms are the main means by which the district can open up to the outside environment, policy intervention is needed when leader firms tend toward exclusivity.

In addition, in relation to industrial districts' network structures, the findings outline how particular attention should be paid to the geographical proximity of both backward and forward linkages since in both districts, they play a crucial role for their viability. This contradicts the mainstream literature on industrial districts (Trigilia, 1986; Sforzi, 1989; Becattini, 2000), according to which the

dynamism of the district is discussed only in relation to its closure. In Montebelluna, for instance geographically proximate backward linkages allow respondents to engage in problem solving activities with suppliers. Conversely, respondents display distant forward linkages. Distant buyers and retailers also seem to provide valuable information as they have a deeper knowledge of the end market. In this context, forward linkages provide those extra-district networks whose main function is to provide accurate and reliable information on foreign markets with potential great adaptive value. In this respect, the evolution of the district proves that network openness (in terms of extra-district networks and their social dimension) is crucial for Montebelluna's adaptive efficiency and has profound implications for the competitive strategy of the industrial district as a whole and its constituent firms.

The findings indicate that besides the presence of an open network structure and the existence of critical actors such as leading firms and "gate-keepers of knowledge", another feature seems to be relevant to assess their viability. Drawing on the taxonomy introduced earlier according to which Montebelluna aligns best with industrial districts type II and Northampton with industrial districts type I, the research shows that different network structures displaying different degrees of emdeddedness can also enhance or derail the adaptive efficiency of the districts by providing different mechanisms of coordination which in turn imply different transaction costs. Overall, it emerges that higher levels of cooperation are associated with relationships that have been developed over time and possess a social connotation.

In this context, an open network structure made up of stable linkages of a socio-economic nature can be seen as a competence-enhancing capability for the district: by relying on stable socio-economic networks (regardless of their geographical proximity), the district

seems more flexible when dealing with global competition, dynamic volatility and progressive market segmentation. In this sense, it emerges that an open network structure made of stable socio-economic networks is more conducive to adaptive efficiency.

At the firm level of analysis, the research question that was addressed was whether the relational asset of the firm can still be a source of competitive advantage. By addressing this question the research intended to provide a theoretically integrated statement of the relational asset of the firm and a systematic analysis of the conditions under which it may lead to a competitive advantage for the single firm.

Drawing on the different experiences of Montebelluna and Nortampton, we identified several firms that sustain the viability of industrial districts. In particular the role of "gate-keepers of knowledge" was shown to be particularly crucial for the provision of critical information such as the information about sectoral trends, innovation, technological expertise and distant markets. The findings also suggested that the role "gate-keepers of knowledge" may be endorsed by different actors, ranging from large district firms (either local firms or MNCs) to small and medium sized firms operating in the final market or as suppliers or subcontractors.

In particular by looking at the relational assets of the gate-keepers identified in our comparison (i.e. the suppliers of components in Montebelluna), the findings indicate that acquiring and spreading critical knowledge often occur in relation to informal contacts. As it was for the district level, the findings outline how in all the types of linkages under investigation, the acquisition of critical information is associated with relationships that have been developed over time and possess a social connotation. In this context, the firm's networking

strategy can be seen as a competence-enhancing capability: by developing stable relationships of a socio-economic nature with other firms (regardless of their geographical proximity), the firm seeks to gain access to or exert control over scarce resources (e.g. critical information). This has long-term profitability implications for the firm and thus a networking strategy can be seen as a competitive strategy that may lead to sustainable advantage for the single firm as well for the adaptive efficiency of the district as a whole.

Overall from the comparative study, the research shows that the extent to which this upgrading will be successful largely depends on the assertiveness of a "joint action" between small firms, larger firms and local institutions. More precisely, the different experiences of Montebelluna and Northampton proved that "gate-keepers of knowledge", especially in the case of leading firms, may have the "abilities" to identify relevant sources of information and acquire critical information but they may not have the "willingness" to share it with the other district firms. In this context, the research argued that the role of local institutions is to act as "gate-keepers of knowledge" by providing the crucial information that large firms may be unwilling to share. Similarly, when the establishment of MNCs or other forms of FDI do not provide any benefit to the other district firms because they tend toward exclusivity, policy intervention is needed. In particular, the research identified that local policy intervention in these cases should be aimed at preserving intra-district trade flows by creating incentives for firms to reduce outward outsourcing outside the district boundaries or by providing those externalities that the district may be lacking as a result.

8.4 Limitations of the present research

The research displays several limitations. Firstly, at the conceptual level of analysis the research endorses quite a static framework to assess a dynamic phenomenon. Although several variables of change were incorporated into the theoretical framework to counterbalance this effect, such as taking into account both endogenous and exogenous causes of change (i.e. districts' origins and their evolution, the transient nature of both sectoral trends as well as technological regimes) as well as gathering longitudinal indicators of economic performance, a longitudinal study would have brought more rigour to the findings. The need to utilise a more dynamic theoretical framework will be further articulated in Section 8.5 when discussing suggestions for further research.

Secondly, from a methodological point of view, the limited size of the sample allows for a limited generalisability of the results. The aim of study was mainly exploratory but relying on two larger samples could have been beneficial for the research by allowing a more extensive use of statistical analysis to strengthen the external validity of the findings.

Thirdly, the data collection methods adopted were also constrained by the difficulty in getting access to small firms. Undoubtedly, the most difficult aspect of the research was accessing a suitable sample. There were three main reasons for this difficulty. First, there were rarely up-to-date directories from which to recruit a convincingly representative sample. The problem was partially addressed by relying on the judgement of key informants. Secondly, as stated by one of the respondents, small firm owners are busy people, often under considerable pressure. Understandably some of them did not seem too sympathetic to requests concerning making available some of their time. Thirdly, some respondents were clearly sceptical about

the relevance of the research, the potential benefits for them and the confidentiality of the process (A full list of the reasons of the respondents who declined the invitation to participate in the study is enclosed in the Appendix).

Finally, although statistical data was widely available for Montebelluna it could not be fully exploited because of its limited value in terms of comparability since the equivalent information was not available for Northampton. The limited availability of data for Northampton is due to several reasons. For instance, the Footwear Industry Statistical Review ceased publication in 1998 and the British Footwear Association provides only national data-sets (in million pairs) and some scattered longitudinal data at local level (up to 2001). Statistics provided by the DTI is more accurate but again data is aggregated at regional level and stops in 2001. This limited availability of data was not completely satisfactory for the comparative purpose of this research and it represents one of its main limitations. Indeed the availability of more robust comparative longitudinal data on the key characteristics of the two districts might have provided more explanatory value to the findings.

8.5 Suggestions for further research

In this concluding section, a crucial issue for further research is addressed: the need to move from a static to a dynamic theoretical framework. This emerged clearly from the empirical evidence as an important step to understand how industrial districts and the contextual presence of different factors (both within districts and outside their boundaries) react to dramatic change in their competitive environment and how these reactions affect industrial districts' adaptive efficiency.

The industrial district model as described by the literature is strictly a static model (Rabellotti, 1997). Industrial districts in the literature have been traditionally described by a set of stylised features, without really recognising that these features can change over time. Discontinuous change has seldom attracted the attention of the mainstream literature on industrial districts, apart from a very few contributions. Garofoli in 1982 was the first to stress the possibility that an alteration of both internal and external conditions could generate radical changes in the structure of industrial districts (Garofoli, 1982, 1983). Similarly, other scholars devoted some attention to this important aspect (Amin & Thrift, 1994; Rabellotti, 1997; Lazerson & Lorenzoni, 1999; Guerrieri & Pietrobelli, 2001; Maskell, 2001; Bathelt et. al., 2004; Murat & Paba, 2004; Giuliani, 2005; Giuliani & Bell, 2005; Tappi, 2005; Iammarino & McCann, 2006). The question of change and the adaptive efficiency of industrial districts have become particularly crucial, but there is still a lack of empirical work to fully address this issue.

In particular, given that a significant finding of the research is the existence of a wide heterogeneity of actors within districts, in a dynamic perspective this implies that firms can also undertake different strategies when dealing with change. In Montebelluna for instance, the evidence show how a wide variety of firms can coexist within the same district: there are leading firms that are more receptive than others towards the adoption of innovation, larger firms that are more engaged than others in the international value chain, "gate-keepers of knowledge" as well as external actors such as distributors and retailers that can provide complementary resources with a high potential adaptive value for the district.

More importantly the evidence has shown how the "topological stability" of the district seems increasingly underpinned by extra-

district networks in which strategic cooperation occurs with selected partner firms as opposed to generic incidental relationships. These strategic relationships are often aimed at providing specific and complementary resources and are not necessarily confined within the district boundaries.

Nonetheless, it must be added that although not all of the district firms participate directly in the process of upgrading linkages induced by leading firms, they may receive some benefits from the changes occurring at the district level. They may for example benefit from the increasing competition among the suppliers and from the improved quality and fashion content of raw materials and components. In other words, even if they do not take part in specific cooperative relationships they may experience some benefits deriving from the networking activity of more dynamic firms (e.g. "gate-keepers of knowledge").

In this sense it seems crucial to understand fully how change affects industrial districts, taking into consideration the heterogeneity of the actors and their different responsiveness to both endogenous and exogenous change. In particular, as the evidence has shown, the response to dramatic change increasingly depends on the ability to build cooperative linkages both within and outside the district; therefore the need to move from a static to a dynamic theoretical framework represents a priority for future research.

Ultimately, a more general indication for further research can be derived: the comparison of different industrial districts at a given point in time is an exercise which displays severe limitations. As both clusters and industrial districts might mutate over time, future research attempting to undertake an exhaustive analysis of their network structures should also address this issue.

REFERENCES

Aage, T., 2002. Absorptive Capacity Of Firms In Industrial Districts. *EAEPE Conference*, 9-11 November 2002, Siena.

Ahuja, G., 2000. Collaboration Networks, Structural Holes And Innovation: A Longitudinal Study. *Administrative Science Quarterly*, 45(3), pp. 425-455.

Albert, M., 1991. *Capitalism versus Capitalism*. Paris: Seuil.

Aldrich, H. and Zimmer, C., 1986. Entrepreneurship Through Social Networks. In: D. Sexton and R. W. Smilor, eds. *Art and Science of Entrepreneurship*. Cambridge, MA: Ballinger Publishing Company. pp. 3-24.

Amighini, A. and Rabellotti, R., 2003. The Effects Of Globalization On Italian Industrial Districts: Evidence From The Footwear Sector. *Clusters, Industrial Districts and Firms: the Challenge of Globalization Conference*, 12-14 September 2003, Modena.

Amin, A. and Thrift, N., 1994. *Globalization, Institutions and Regional Development in Europe*. Oxford: Oxford University Press.

Anastasia, B. and Coro', G., 1996. *Evoluzione Di Un'economia Regionale. Il Nordest Dopo Il Successo*. Venice: Ediciclo.

Asheim, B. and Isaksen, A., 1997. Location, Agglomeration and Innovation: Towards Regional Innovation Systems In Norway? *European Planning Studies*, 5(3), pp. 299-330.

Associazione Nazionale Calzaturifici Italiani, 2002 *Il Settore Calzaturiero nel 2002*. Available from www.anci-calzature.com.

Bagnasco, A. and Sabel C. F., 1995. *Small and Medium-Size Enterprises*. London: Pinter.

Bagnasco, A., 1977. *Tre Italie: La Problematica Territoriale Dello Sviluppo Italiano*. Bologna: Il Mulino.

Bagnasco, A., 1996. *L'Italia in Tempi di Cambiamento Politico.* Bologna: Il Mulino.

Baker, P., 1995. Small Firms, Industrial Districts and Power Asymmetries. *International Journal of Entrepreneurial Behaviour and Research*, 1(1), pp. 8-25.

Barringer, B. R. and Harrison, J. S., 2000. Walking a Tightrope: Creating Value Through Interorganizational Relationships. *Journal of Management,* 26(3), pp. 357-404.

Bathelt, H., Malmberg, A. and Maskell, P., 2004. Clusters and Knowledge: Local Buzz, Global Pipelines and the Process of Knowledge Creation. *Progress in Human Geography*, 28(1), pp. 31-56.

Becattini, G., 1990. The Marshallian Industrial District as a Socio-economic Notion. In: F. Pyke, G. Becattini and W. Sengenberger, eds. *Industrial Districts and Inter-firm Cooperation in Italy*. London: Routledge. pp. 37-51.

Becattini, G., 2000. *Il Distretto Industriale*. Turin: Rosenberg & Sellier.

Becattini, G., 2001. *Distretti Industriali e Sviluppo Locale*. Turin: Bollati Boringhieri.

Becattini, G., 2002. Industrial Sectors and Industrial Districts: Tools for Industrial Analysis. *European Planning Studies,* 10(4), pp. 483-493.

Bellandi, M. and Trigilia, C., 1991. Come Cambia un Distretto Industriale: Strategie di Riaggiustamento e Tecnologie Informatiche Nell'industria Tessile di Prato. *Economia e Politica Industriale,* 70, pp. 121-152.

Bellandi, M., 1996. On Entrepreneurship, Region and the Constitution of Scale and Scope Economies. *European Planning Studies,* 4 (4), pp. 421-438.

Bellandi, M., 2001. Local Development and Embedded Large Firms. *Entrepreneurship and Regional Development,* 13(3), pp. 189-210.

Bellandi, M., 2003. Industrial Clusters and Districts in The New Economy: Some Perspectives and Cases. In: R. Sudgen, R. Hartung Cheng and R. Meadows, eds. *Urban and Regional Prosperity in a Globalized New Economy*. Cheltenham and Brookfield: Edward Elgar. pp. 196-219.

Belussi, F. and Asheim, B., 2003. Industrial Districts and Globalisation: Learning and Innovation in Local and Global Production Systems. *Clusters, Industrial Districts and Firms: the Challenge of Globalization Conference*, 12-14 September 2003, Modena.

Belussi, F., 2003. The Changing Governance of IDs: The Entry of Multinationals in Local Nets. The Case of Montebelluna. *Clusters, Industrial Districts and Firms: the Challenge of Globalization Conference*, 12-14 September 2003, Modena.

Belussi, F., 2005. Are Industrial Districts Formed by Networks Without Technologies? *European Urban and Regional Studies*, 12 (3), pp. 247-268.

Berger, S. and Locke, R. M., 2001. *Il Caso Italiano and Globalization*. In: Faust, M., Voskamp, U. and Wittke, V. (eds.): European Industrial Restructuring in a Global Economy: Fragmentation and Relocation of Value Chains, Göttingen: SOFI, pp. 319-337.

Best, M., 1990. *The New Competition: Institutions of Industrial Restructuring*. Cambridge: Polity Press.

Bianchi, P., 2002. *Che Cosa Impariamo Dalla Crisi Argentina. L'Industria*. Bologna: Il Mulino.

Birkinshaw, J., 2000. Upgrading of Industry Clusters and Foreign Investment. *International Studies of Management & Organisation,* 30 (2), pp. 93-113.

Birley, S., Cromie, S. and Myers, A., 1988. *Entrepreneurial networks in Northern Ireland*. Northern Ireland Small Business Institute Working Papers.

Blomstrom, M. and Kokko, A., 1998. Multinational corporations and spillovers. *Journal of Economic Surveys,* 1(2), pp. 247-248.

Boekholt, P., 1997. *The Public Sector at Arms Length or in Charge? Towards a Typology of Cluster Policies*. OECD programme National Innovation Systems, Amsterdam.

Borgatti, S., Jones, C. and Everett, M., 1998. Network Measures of Social Capital. *Connections*, 2(1), pp. 27-36.

Brenner, N., 1999. Globalisation as Reterritorialisation: The Re-scaling of Urban Governance in the European Union. *Urban Studies*, 36 (3), pp. 431-451.

Brenton, P. and Winters, A., 1993. Voluntary Export Restraints and Rationing: UK Leather Footwear Imports from Eastern Europe. *Journal of International Economics*, 3 (4), pp. 289-308.

Brenton, P., Pinna, A. M. and Vancauteren, M., 2000. *Adjustment to Globalisation: A Study of the Footwear Industry in Europe*. CEPS Working Document No.51.

Brislin, R.W., 1970. Back-translation for Cross-cultural Research. *Journal of Cross-Cultural Psychology*, 1(1), pp. 185-216.

British Footwear Association, 2003. *British Footwear Association 2002/2003 Annual Report*. Available from www.britfoot.com.

Brusco, S. and Sabel, C., 1981. Artisan Production and Economic Growth. In: F. Wilkinson, ed. *The Dynamics of Labour Market Segmentation*. London: Academic Press. pp. 99-113.

Brusco, S., 1975. *Organizzazione del Lavoro e Decentramento Produttivo nel Settore Metalmeccanico*. Bari: Flm Bergamo Sindacato e Piccola Impresa.

Brusco, S., 1990. The Idea of Industrial Districts. In: F. Pike, G. Becattini and W. Sengenberger, eds. *Industrial Districts and Inter-firm Cooperation in Italy*. London: Routledge. pp. 185-219.

Bull, A. Pitt, M. and Szarka, J., 1993. *Entrepreneurial Textile Communities: A Comparative Study of Small Textile and Clothing Firms*. London: Chapman & Hall.

Burt, R. S. 2001. The Social Capital of Structural Holes. In: M. F. Guillen, R. Collins, P. England and M. Meyer, eds. *Economic Sociology at the Millenium.* New York: Russell Sage Foundation. pp. 148-190.

Burt, R. S., 1992. *Structural Holes*. Cambridge, MA: Harvard University Press.

Calza-Bini P., 1996. *Sistema Locale e Distretto Industriale: il Caso di Civita Casteliana*. Firenze: Biblioteca Comunale.

Campbell, A. and Luchs, K. S., 1997. *Core Competency-based Strategy.* London: International Thomson Business Press.

Cantwell, B. and Iammarino, S., 2003. *Multinational Corporations and European Regional Systems of Innovation*. London: Routledge.

Carbonara, N. 2002. New Models of Inter-firm Networks Within Industrial Districts. *Entrepreneurship and Regional Development*, 1(4), pp. 229.246.

Chell, E. and Baines, S., 2000. Networking, Entrepreneurship and Microbusiness Behaviour. *Entrepreneurship and Regional Development*, 1(2), pp. 195-215.

Coleman, J. S., 1988. Social Capital in the Creation of Human Capital. *American Journal of Sociology,* 9(4), pp. 95-120.

Conti, S. and Julien, P. A., 1981. *Miti e Realta' del Modello Italiano*. Bologna: Patron.

Cooke, P. and Morgan, K., 1994. Growth Regions Under Duress: Renewal Strategies in Baden-Wurttemberg and Emilia Romagna. In: A. Amin and N. Thrift, eds. *Globalization,*

Institutions and Regional Development in Europe. Oxford: Oxford University Press. pp. 91-117.

Coro', G. and Grandinetti, R., 2001. Industrial District Responses to the Network Economy: Vertical Integration Versus Pluralist Global Exploration. *Human Systems Management*, 20(3), pp. 189-199.

Courlet, C. and Soulage, B., 1995. Industrial Dynamics and Territorial Space. *Entrepreneurship and Regional Development*, 7(4), pp. 287-307.

Curran, J. and Blackburn, R., 1994. *Small Firms and Local Economic Networks*. London: Paul Chapman Publishing Ltd.

Curran, J. and Blackburn, R., 2001. *Researching the Small Enterprise*. London: Sage Publications.

Curran, J., Rutherfoord, R. and Lloyd Smith, S., 2000. Is there a Local Business Community? Explaining the Non-participation of Small Business in Local Economic Development. *Local Economy*, 15(2), pp. 128-143.

Dacin, M., Ventresca M. and Beal, B., 1999. The Embeddedness of Organizations: Dialogue and Directions. *Journal of Management,* 2(5), pp. 317-341.

Dasgupta, P. and Serageldin, I., 2000. *Social capital: A Multifaceted Perspective*. Washington: World Bank.

De Toni, A. and Nassimbeni, G., 1996. Strategic and Operational Choices for Small Subcontracting Firms: Empirical Results and an Interpretative Model. *International Journal of Operations and Production Management*, 16(6), pp. 41-56.

De Toni, A., Nassimbeni, G. and Tonchia S., 1995. Small Local Firms inside the Supply Chain: Challenges and Perspectives. *Small Business Economics,* 7(3), pp. 241-249.

Dei Ottati, G. 1994. Trust, Interlinking Transactions and Credit in the Industrial District. *Cambridge Journal of Economics*, 1(8), pp. 529-546.

Dei Ottati, G., 1987. *Il mercato comunitario.* In*: G. Becattini,* ed*. Mercato e forze locali: Il distretto industriale*. Bologna: Il Mulino. pp. 117-142.

Dei Ottati, G., 2002. Social Concertation and Local Development: The Case of Industrial Districts. *European Planning Studies*, 10(4), pp. 449-466.

Denzin, N. K., 1978. *The Research Act*. New York: McGraw-Hill.

Department of Trade and Industry, 2001. *Business Clusters in the UK. A First Assessment.*

Di Maggio, P. and Powell, W., 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review,* 48, pp. 147-160.

Driffield, N. and Hughes, D., 2003. Foreign and Domestic Investment: Regional Development or Crowding Out? *Regional Studies,* 37(3), pp. 277-288.

Durante, A., 1997. *Montebelluna fa Giocare il Mondo*. Montebelluna: Fondazione Museo dello Scarpone e della Calzatura Sportiva.

Easterby-Smith, M., Thorpe, R. and Lowe, A., 1991. *Management Research: An Introduction*. London: Sage.

Enright, M., 1996. Regional Clusters and Economic Development: A Research Agenda. In: U. Staber, N. Schaefer and B. Sharma, eds. *Business Networks: Prospects for Regional Development*. Berlin: Walter de Gruyter. pp. 190-213.

Enright, M., 2003. Regional Clusters: What We Know and What We Should Know. In: J. Brocker, D. Dohse and R. Soltwedel, eds. *Innovation Clusters and Interregional Competition*. Berlin: Springer. pp. 99-129.

Ernst, D., 2000. Globalization, Information Technology and the Changing Geography of Innovation Systems: A Policy

Perspective on Global Production Networks. *Journal of the Economics of Innovation and New Technologies* (Special issue).

European Commission, 2001. *Report on the Promotion of Competitiveness and Employment in the European Footwear Industry*. Brussels, (SEC 20 01 36).

Firm Alpha, 2002, *Production Book*. Northampton, UK.

Freeman, C., 1995. The National System of Innovation in Historical Perspective. *Cambridge Journal of Economics,* 19(1), pp. 5-24.

Freeman, R. E., 1994. *Ethical Theory and Business*. Englewood Cliffs, New Jersey: Prentice Hall.

Frey, L., 1974. *Il Problema del Decentramento Produttivo*. Economia e Politica Industriale 6, pp. 114-115.

Fukuyama, F., 1995. *Trust. The Social Virtues and the Creation of Prosperity*. New York: Free Press Paperbacks.

Garnsey, E. and Cannon-Brookes, A., 1993. Small High Technology Firms in an Era of Rapid Change: Evidence from Cambridge. *Local Economy,* 7(4), pp. 318-333.

Garofoli, G., 1982. *Economia del Territorio*. Milano: Angeli.

Garofoli, G., 1983. Le Aree Sistema. *Politica ed Economia,* 1(4), pp. 57-60.

Gartner, W., 1990. What Are We Talking About When We Talk About Entrepreneurship? *Journal of Business Venturing*, 5(1), pp. 15-29.

Gartner, W., 2001. Is There an Elephant in Entrepreneurship? Blind Assumptions in Theory Development. *Entrepreneurship Theory and Practice*, 25(4), pp. 27-39.

George, G., Robley Wood, D. Jr. and Khan, R., 2001. Networking Strategy of Boards: Implications for Small and Medium-sized Enterprises. *Entrepreneurship and Regional Development,* 1(3), pp. 269-285.

Gereffi, G., 1999. International Trade and Industrial Upgrading in the Apparel Commodity Chain. *Journal of International Economics*, 48(1), pp. 37-70.

Giddens, A., 1998. *The Third Way. The Renewal of Social Democracy*. London: Polity Press.

Giddens, A., 2000. *The Third Way and its Critics*. London: Polity Press.

Giuliani, E. and Bell, M., 2005. The Micro-determinants of Meso-level Learning and Innovation: Evidence from a Chilean Wine Cluster. *Research Policy*, 34 (1), pp. 47-68.

Giuliani, E., 2005. Cluster Absorptive Capacity: Why Do Some Clusters Forge Ahead and Others Lag Behind? *European Urban and Regional Studies*, 12(3), pp. 269-288.

Giuliani, E., Pietrobelli, C. and Rabellotti, R., 2003. Upgrading in Global Value Chains: Lessons from Latin American Clusters. *Clusters, Industrial Districts and Firms: the Challenge of Globalization Conference*, 12-14 September 2003. Modena.

Glaser, D. G. and Strauss, A. L., 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York: Aldine.

Grandinetti, R., 2003. The Evolution of Industrial Districts in a Knowledge-based Perspective. *Clusters, Industrial Districts and Firms: the Challenge of Globalization Conference,* 12-14 September 2003. Modena.

Granovetter, M., 1985. Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, 7(8), pp. 1360-1380.

Granovetter, M., 1991. The Social Construction of Economic Institutions. In: A. Etzioni and P. Lawrence, eds. *Socio-economics: Toward a New Synthesis*. New York: Armonk.

Guerrieri, P. and Pietrobelli, C., 2000. *Models of Industrial Districts' Evolution and Changes in Technological Regimes.* DRUID Working Papers.

Gulati, R., 1999. Network Location and Learning: The Influence of Network Resources and Firm Capabilities an Alliance Formation. *Strategic Management Journal*, 20, pp. 397-420.

Hall, E. T., 1963. *The Silent Language.* New York: Anchor Books.

Hamel, G., 1991. Competition for Competence and Inter-partner Learning within Strategic Alliances. *Strategic Management Journal* , 12, pp. 83-103.

Hansen, E. L., 1995. Entrepreneurial Networks and New Organisation Growth. *Entrepreneurship: Theory and Practice,* 19(4), pp. 7-20.

Harrison, B., 1994. *Lean and Mean: the Changing Landscape of Corporate Power in the Age of Flexibility.* New York: Basic Books.

Harrison, B., Kelley, M. R. and Gant, J., 1996. Innovative firm behaviour and local milieu: exploring the intersection of agglomeration, firm effects, and technological change. *Economic Geography,* 72, pp.233-258.

Henry, N., 1992. The New Industrial Spaces: Locational Logic of a New Industrial Era. *International Journal of Urban and Regional Research,* 16, pp.375-396.

Hertz, N., 2001. *The Silent Takeover.* London: William Heinemann.

Hill, J., McGowan, P. and Drummond, P., 1999. The Development and Application of a Qualitative Approach to Researching the Marketing Networks of Small Firm Entrepreneurs. *Qualitative Market Research: An International Journal,* 2(2), pp. 71-81.

Hirst, P. and Thompson, G., 1996. *Globalization in Question: The International Economy and the Possibilities of Governance*. Cambridge: Polity Press.

Hite, J. M. and Hesterly W. S., 2001. The Evolution of Firm Networks: from Emergence to Early Growth of the Firm. *Strategic Management Journal,* 22(3), pp. 275-286.

Hofstede, G., 1980. *Culture's Consequences: International Differences in Work-Related Values*. Beverly Hills: Sage.

Hoover, E. M., 1948. *The Location of Economic Activity*. New York: McGraw-Hill.

Hornik, K., 1993. Some New Results on Neural Network Approximation. *Neural Networks,* 6(8), pp. 1069-1072.

Humphrey, J. and Schmitz, H., 2002. *Developing Country Firms in the World Economy: Governance and Upgrading in Global Value Chains*, INEF Report 61.

Iammarino, S. and McCann, P., 2006. The Structure of Industrial Clusters: Transactions, Technology and Knowledge Spillovers. *Multidisciplinary Seminar Series in Globalisation*. IIIS, Trinity College, Dublin.

Isaksen, A., 2001. Building Regional Innovation Systems: Is Endogeneous Industrial Development Possible in the Global Economy? *Canadian Journal of Regional Science,* 14(1), pp. 101-120.

Jick, T. D., 1979. Mixing Qualitative and Quantitative methods: Triangulation in Action. *Administrative Science Quarterly*, 24, pp. 602-611.

Johannisson, B. and Nilsson, A., 1989. Community Entrepreneurs: Networking for Local Economic Development. *Entrepreneurship and Regional Development,* 1, pp. 3-19.

Johannisson, B., 1986. Network Strategies: Management Technology for Entrepreneurship and Change. *International Small Business Journal*, 5(1), pp. 19-30.

Johannisson, B., 1995. Paradigms and Entrepreneurial Networks, Some Methodological Challenges. *Entrepreneurship and Regional Development,* 7, pp. 215-231.

Johannisson, B., Alexanderson, K. N. and Senneseth, K., 1994. Beyond Anarchy and Organisation: Entrepreneurs in Contextual Networks. *Entrepreneurship and Regional Development*, 6, pp. 329-356.

Kaplinsky, R. and Readman, J., 2001. Integrating SMEs in Global Value Chains: Towards Partnership for Development. United Nations Industrial Development Organisation. Vienna.

Kaplinsky, R., 2000. Spreading the Gains from Globalization? What Can Be Learned from Value Chain Analysis? *Institute of Development Studies Working Paper n.110*.

Key Note Report, 2003. *Market Review 2003. Clothing and the Footwear Industry*.

Krugman, P., 1996. *The Self-Organising Economy*. London: Blackwell.

Larson, A., 1992. Network Dyads in Entrepreneurial Settings: A Study of the Governance of Exchange Relationships. *Administrative Science Quarterly*, 37, pp.76-104.

Lasserre, P., 2003. *Global Strategic Management.* Basingstoke: Palgrave.

Laurent, A., 1986. The Cross-cultural Puzzle of Global Human Resource Management. *Human Resources Management,* 25(1), pp. 91-102.

Lazerson, M. H. and Lorenzoni, G., 1999. The Firms that Feed Industrial Districts: a Return to the Italian Source. *Industrial and corporate change*, 8(2), pp. 235-266.

Levi-Strauss, C., 1971. *L'Homme Nu*. Paris: Plon.

Lipparini, A. and Lorenzoni, G., 2000. *Imprenditori e Imprese. Idee, Piani, Processi*. Bologna: Il Mulino.

Lomi, A., 1991. *Reti Organizzative. Teoria, Tecniche e Applicazioni*. Bologna: Il Mulino.

Lorenzen, M., 2005. Why Do Clusters Change? *European Urban and Regional Studies*, 12, 3, pp. 203-208.

Macri', D. and Tagliaventi, M., 2000. *La Ricerca Qualitativa nelle Organizzazioni. Teorie, Tecniche, Casi*. Rome: Carocci.

Magatti, M., 1993. The Market and Social Forces: A Comparative Analysis of Industrial Change. *International Journal of Urban and Regional Research*, 1(7), pp. 213-231.

Maillat, D., 1996. *From the Industrial District to the Analysis of Territorialized Productive Organizations*. Institut de Recherches Economiques et Regionales Universite de Neuchatel Working Paper.

Mariotti, S. and Piscitello, L. 2001. Localised Capabilities and the Internationalisation of Manufacturing Activities by SMEs. *Entrepreneurship and Regional Development*, 13, pp.65-80.

Markusen, A., 1996. Sticky Place in Slippery Space: a Typology of Industrial Districts. *Economic Geography*, 72(3), pp. 293-313.

Marshall, A., 1920. *Industry and Trade*. 3rd ed. London: Macmillan.

Marshall, A., 1930. *Principles of Economics*. 8th ed. London: Macmillan.

Martin, R. & Sunley, P., 2003. Deconstructing Clusters: Chaotic Concept or Policy Panacea? *Journal of Economic Geography*, 3, pp. 5-35.

Maskell, P. & Lorenzen, M., 2004. The Cluster as Market Organisation, 41(5/6), pp. 991-1009.

Maskell, P., 2001. Knowledge Creation and Diffusion in Geographic Clusters. *International Journal of Innovation Management*, 5(2), pp. 213-237.

Maskell, P., 2001. The Firm in Economic Geography. *Economic Geography,* 77, 4, pp. 329-344.

Material provided by the Shoe Collection, Unpublished article. Mechanisation and Northampton's shoemaker. Northampton Museums and Art Gallery.

McDonald, F. and Burton, F., 2002. *International Business*. London: Thompson.

McDonald, F. and Vertova G., 2001. Clusters, Industrial Districts and Competitiveness. In: R. McNaughton and M. Green, eds. *Global Competition and Local Networks*. London: Gower. pp.38-74.

McGrew, T., 2001. Feature Review – Globalization: A Critical Introduction. New Political Economy 6(2), pp. 293-301.

Mead, M., 1953. *The Study of Culture at a Distance*. New York: University of Chicago Press.

Mistri, M. and Solari, S., 2001. Social Networks and Productive Connectance: Modelling the Organizational Form of the Industrial District. *Human Systems Management,* 20, pp. 223-235.

Mitchell, C., 1997. Identifying and Stimulating Clusters. A Local Initiative with National Import. *Firm Connections,* 5(5), pp. 11-12.

Mundim A. P. F., Rossi A. and Stocchetti A., 2000. SMEs in Global Market: Challenges, Opportunities and Threats. *Brazilian Electronic Journal of Economics*, 3(1).

Murat, M. and Paba, S., 2004. International Migration, Outsourcing and Italian Industrial Districts. *Materiali di Discussione*. Dipartimento di Economia, Università di Modena e Reggio Emilia, no. 464.

Nassimbeni, G., 1998. Network Structures and Co-ordination Mechanisms: a Taxonomy. *International Journal of Operations and Production Management*, 18(6), pp. 538-554.

Nassimbeni, G., 2002. Local Manufacturing Systems and Global Economy: Are They Compatible? The Case of the Italian Eyewear District. *Journal of Operations Management,* 21(2), pp. 151-171.

NERA and Berwin, S. J. & Co., 1999. *The Consequences of the Choice of Regime of Exhaustion in the Area of Trademarks, Final Report for DG XV of the European Commission*.

North, D., 1990. *Institutions, Institutional Change and Economic Performance*, New York: Cambridge University Press.

Northampton Borough Council. www.northampton.gov.uk/.

Northamptonshire ELMA 2004. *Competitive Business*.

Nuti, F. 1992. *I Distretti Delll'industria Manifatturiera in Italia*. Milano: Franco Angeli.

O' Donnell, A., Gilmore, A., Cummins, D. and Carson, D., 2001. The Network Construct in Entrepreneurship Research: A Review and Critique. *Management Decision,* 39(9), pp. 749-760.

Ohmae, K. 1995. *The End of the Nation State: The Rise of Regional Economies*. London: HarperCollins.

Osem Report 2001, Rapporto Osem 2001, Veneto Banca, Treviso.

Oughton, C. and Whittam, G., 1997. Competition and Cooperation in the Small Sector. *Scottish Journal of Political Economy*, 44(1), pp. 1-29.

Palan, R., Abbot, J. and Deans P., 1996. *State Strategies in the Global Economy*. London and New York: Pinter.

Pambianco, C., 2000. *Calzature: Nuove Strategie per Vincere le Sfide del Mercato Globale*. Milano: Pambianco Strategie di Impresa.

Paniccia, I., 1998. One, a Hundred, Thousands of Industrial Districts: Organizational Variety in Local Networks of Small and Medium-sized Enterprises. *Organization Studies*, 19(4), pp. 667-700.

Peterson, M. and Raghu, R., 1994. The Benefits of Lending Relationships: Evidence from Small Business Data. *Journal of Finance,* 4(9), pp. 3-37.

Pfeffer, J. and Salancik G. R., 1978. *The External Control of Organization.* New York: Harper & Row.

Piore, M. J. and Sabel C. F., 1984. *The Second Industrial Divide: Possibilities for Prosperity*. New York: Basic Books.

Piore, M. J. and Sabel, C. F., 1983. Italian Small Business Development: Lessons for U.S. industrial policy. In: L. Zysman and J. Tyson, eds. *American Industry in International Competition: Government Policy and Corporate Strategies*. Ithaca: Cornell University Press.

Piore, M., 1986. Perspectives on Labour Market Flexibility. *Industrial Relations*, 25(2), pp. 146-166.

Podolny, J., 1994. Market Uncertainty and the Social Character of Economic Exchange. *Administrative Science Quarterly*, 39(3), pp. 458-483.

Polanyi, K., 1957. *The Great Transformation*. Boston: Beacon Press.

Porter, M. and Van der Linde, C., 2004. *Cluster Profiles: Institute for Strategy and Competitiveness*. Harvard Business School. Available at http//data.isc.hbs.edu/cp

Porter, M., 1985. *Competitive Advantage*. New York: Free Press.

Porter, M., 1990. *The Competitive Advantage of Nations*. London: Macmillan.

Provan, K. G. and Human, S. E., 1999. Organizational Learning and the Role of Network Broker in Small-firm Manufacturing Networks. In: A. Granadori, ed. *Interfirm Networks: Organization and Industrial Competitiveness*. London and New York: Routledge. pp. 185-207.

Pyke, F. Becattini, G. and Sengenberger, W., eds., 1990. *Industrial districts and inter-firm cooperation in Italy*. London: Routledge.

Rabellotti, R., 1995. Is there an 'Industrial District Model'? Footwear districts in Italy and Mexico compared. *World Development,* 23, pp. 29-42.

Rabellotti, R., 1997. *External Economies and Cooperation in Industrial Districts: A comparison of Italy and Mexico*. Basingstoke: Macmillan.

Rabellotti, R., 2001. *The effect of globalisation on industrial districts in Italy: the case of Brenta*. IDS Working Paper 44.

Rabellotti, R., 2003. How globalisation affects Italian industrial districts: The case of Brenta. In: H. Schmitz, ed. *Local Enterprises in the Global Economy: Issues of Governance and Upgrading*. London: Edward Elgar Publishers.

Radice, H., 1998. 'Globalization' and National Differences. *Competition and Change*, 3, pp. 263-291.

Radice, H., 2000. Globalization and National Capitalisms: Theorizing Convergence and Differentiation. *Review of International Political Economy,* 7(4), pp. 719-742.

Robertson, R., 1992. *Globalization: Social Theory and Global Culture*. London: Sage.

Rooks, B. W., 1996. Robots bring Automation to Shoe Production. *Assembly Automation,* 16(3), pp. 22-25.

Rugman, A. and D'Cruz J. R., 2000. *Multinationals as Flagship Firms: Regional business networks*. Oxford: Oxford University Press.

Rugman, A., 2000. *The End of Globalization*. London: Random House Business Books.

Sabel, C., 1989. Flexible Specialisation and the Re-emergence of Regional Economies. In: P. Hirst and J. Zeitlin, eds. *Reversing*

Industrial Decline? Industrial Structure and Policy in Britain and her Competitors. Oxford: Berg.

Saunders, M. Lewis, P. and Thornhill, A., 2000. *Research Methods for Business Students*. London: Prentice Hall.

Saxenian, A. L., 1994. *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*. Cambridge, MA: Harvard University Press.

Schein, E., 1985. *Organization, Culture and Leadership*. San Francisco: Jossey-Bass.

Schmitz, H. and Knorringa, P., 1999. *Learning from Global Buyers*. Institute of Development Studies Working Paper 100.

Schmitz, H., 1992. Industrial Districts: Model and Reality in Baden-Wurttemberg. In: F. Pyke and W. Sengenberger, eds. *Industrial Districts and Local Economic Generation*. Geneva: International Institute for Labour Studies. pp. 87-122.

Schmitz, H., 1995. Small Shoemakers and Fordist Giants: Tale of a Supercluster. *World Development,* 23(1), pp. 9-28.

Schmitz, H., 1997. *Collective Efficiency and Increasing Returns*. Institute of Development Studies Working Paper 50.

Schmitz, H., 1998. *Responding to Global Competitive Pressure: Local Cooperation and Upgrading in the Sinos Valley, Brazil*. Institute of Development Studies Working Paper 52.

Schmitz, H., 2000. Does Local Cooperation Matter? *Oxford Development Studies,* 283, pp.323-336.

Schneider, S. C. and Barsoux J. L., 1997. *Managing Across Cultures*. London: Prentice Hall.

Scholte, J. A., 2000. *Globalization: A Critical Introduction*. Basingstoke: Palgrave.

Scott, A. J., 1998. *Regions and the World Economy: the Coming Shape of Global Production, Competition and Political Order*. Oxford: Oxford University Press.

Scott, A. J., 2001. Globalization and the Rise of City-Regions. *European Planning Studies*, 9(7), pp. 813-826.

Scott, J., 1987. *Organizations*. Englewood Cliffs, New Jersey: Simon & Schuster.

Sforzi, F., 1989. The Geography of Industrial Districts in Italy. In: Goodman, E. *et al.*, eds. *Small Firms and Industrial Districts in Italy*. London: Routledge. pp. 153-173.

Signorini, L. F., 2000. *Lo Sviluppo Locale. Un'indagine della Banca d'Italia sui Distretti Industriali*. Corigliano Calabro: Meridiana Libri.

Slaughter, M., 1998. International Trade and Labour Market Outcomes: Results, Questions, and Policy Options. *Economic Journal*, 108, pp. 1452-1462.

Soda, G. and Usai, A., 1999. The Dark Side of Dense Networks: From Embeddedness to Indebtedness. In: A. Granadori, ed. *Interfirm Networks. Organization and Industrial Competitiveness*. London and New York: Routledge. pp. 276-302.

Spencer, J. E., 1996. Robotics Technology and the Advent of Agile Manufacturing Systems in the Footwear Industry. *Assembly Automation*, 16(3), pp. 10-15.

Staber, U., 1997. Specialization in a Declining Industrial District: The Case of Baden-Württemberg Textiles and Clothing. *Growth and Change*, 28, pp. 475-495.

Staber, U., 2001. The Structure of Networks in Industrial Districts. *International Journal of Urban and Regional Research,* 25(3), pp. 537-552.

Storper, M. 1989. The Transition to Flexible Specialization: The Division of Labour, External Economies, and the Crossing of Industrial Divides. *Cambridge Journal of Economics,* 13, pp. 273-305.

Storper, M., 1990. A Response to Amin and Robins. In: F. Pyke, G. Becattini and W. Sengenberger, eds. *Industrial Districts and Inter-firm Cooperation in Italy*. London: Routledge.

Storper, M., 1997. The Regional World: Territorial Development in a Global Economy. London: The Guilford Press.

Stough, R., 1997. Measuring Quantitative and Expert Response Data in Setting Regional Economic Development Policy: Methodology and Application. *19th Annual Research Conference of the Association for Public Policy Analysis and Management*. Washington, US.

Strang, D., 1991. Adding Social Structure to Diffusion Models. *Sociological Methods & Research,* 19(3), pp. 324-353.

Strauss, A. and Corbin, J., 1990. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. London: Sage Publications.

Sudgen, R. and Wilson J., 2001. *Globalisation, the New Economy and Regionalisation*. Globalization and World Cities Study Group Network, GaWC Research Bulletin 70.

Tappi, D., 2005. Clusters, Adaptation and Extroversion. A Cognitive and Entrepreneurial Analysis of the Marche Music Cluster. *European Urban and Regional Studies,* 12(3), pp. 289-307.

Toms, S. and Filatotchev, I., 2003. Corporate Governance, Network Dynamics and Firm's Strategic Flexibility: A Multi-lens Perspective. *Annual AIB conference*, 5-8 July 2003, California.

Treviso Chamber of Commerce, 2000. *Asolo e Montebelluna centro mondiale della calzatura sportiva. Rapporto Osem 2000.*

Trigilia, C., 1986. *Grandi Partiti e Piccole Imprese*. Bologna: Il Mulino.

Trompenaars, F., 1993. *Riding the Waves of Cultural Differences: Understanding Cultural Differences in Business*. London: Nicholas Brearley.

Uzzi, B., 1996. The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect. *American Sociological Review,* 61(4), pp. 674-698.

Uzzi, B., 1997. Social Structure and Competition in Inter-firm Networks: The Paradox of Embeddedness. *Administrative Science Quarterly*, 42, pp.35-67.

Varaldo, R., 1988. *Il Sistema delle Imprese Calzaturiere*. Firenze: Giappichelli.

Vellinga, M., 2000. *The Dialectics of Globalization: Regional Responses to World Economic Processes: Asia, Europe and Latin America in Comparative Perspective*. Oxford: Westview Press.

Vernon, R., 1966. International Investment and International Trade in the Product Cycle. *Quarterly Journal of Economics*, 29(2), pp. 190-207.

Vernon, R., 1979. The product cycle hypothesis in a new international environment.*Oxford Bulletin of Economics and Statistics,* 41(4), pp. 255-267.

Vipraio, P. T., 1997. *Industrial Districts in Italy: the Problems of Transition of Local Economies into Global Markets*. National Library of Australia Working Paper 245.

Wasserman, S. and Faust, K., 1994. *Social Network Analysis: Methods and Applications*. Cambridge, MA: Cambridge University Press.

Waters, M., 1995. *Globalization*. London and New York: Routledge.

Weber, M., 1928. *Theory of the Location of Industries*. Chicago: The University of Chicago Press.

Williamson, O. E., 1985. *The Economic Institution of Capitalism: Firms, Market, Relational Contracting*. New York: Free Press.

Winters, A. and Takacs, W., 1991. *Labour Adjustment Costs and British Footwear Production*. Oxford Economic Paper 43.

Wood, A., 1998. Globalisation and the Rise in the Labour Market Inequalities. *Economic Journal,* 108, pp. 1463-1482.

Yeung, H., 2000. Reconceptualising the Firm in New Economic Geographies: An Organisational Perspective. *The Firm in Economic Geography Conference*. University of Portsmouth, UK.

Yin, R. K., 1999. *Case Study Research Design and Methods*. London: Sage.

Zeitlin, J., 1995. Why Are There No Industrial Districts in the United Kingdom? In: M. J. Piore and C. F. Sabel, eds. *Small and Medium-size Enterprises*. London: Pinter. pp. 98-113.

Zukin, S. and Di Maggio, P., 1990. *Structures of capital. The Social Organization of the Economy*. Cambridge: Cambridge University Press.

I work as Research Teaching Associate at the School of Management, University of Bath. My PhD thesis is a comparative study between the Northampton and Montebelluna footwear cluster (Treviso, Italy). The main concern of the research is to reconceptualise the link between small enterprise and local community in order to evaluate the ways in which Globalisation is affecting the footwear sector.

I am writing to know whether you would be available to take part to this project. Your participation, which would require a negligible effort in terms of time and commitment, would be invaluable.

Taking part in this project would involve filling in a questionnaire and participating in an interview, arranged on the basis of your availability. Confidentiality and anonymity are granted to all participants. No source, individual or organisational, will be identified or comment attributed without the express permission of the originator. One of the intended outputs will be a report summarising the main findings and I will be sending a copy of this to each of the participants.

I hope the project will match your interests and expectations, the intention would be to provide the participants with something of value, since network studies give numerous advantages to participating firms.

If you require any further information please do not hesitate to get in touch.

Kindest regards,

Alessandra Vecchi

UNIVERSITY OF BATH
SCHOOL OF MANAGEMENT

Thank you for taking part in this survey. This questionnaire is part of a research project to better understand how Globalisation affects the footwear sector. By answering this questionnaire you contribute to a benchmark initiative on the successful management practices for achieving competitive advantage.

The research tries to understand the link between small and medium enterprises and their local communities. The main object is to evaluate the ways in which the Northampton and Montebelluna footwear clusters are adjusting to Globalisation. To this end, I specifically look at the ways in which small and medium enterprises interact with their environment focussing on inter-firm relationships and their link to non-commercial ties.

Please answer the questions freely. Confidentiality and anonymity will be granted to the participants. No source, individual or organisation will be identified or comment attributed without the express permission of the originator. The questionnaire should take 15-20 minutes to be complete. It consists of seven sections: 1. general information about yourself and about the company; 2. company relations with local producers; 3. relations with buyers; 4. relations with subcontractors; 5. relations with suppliers; 6. relations other organisations. Lastly, section 7 concerns the company performance.

RTA A. Vecchi
mnsav@management.bath.ac.uk
University of Bath, School of Management
Bath, BA2 7AY
United Kingdom

COMPANY INFORMATION

1.1 Please provide us with information about yourself

Name:

Email:

Phone:

1.2 Position occupied within the company?

( ) Owner

( ) CEO/Director

( ) General Manager

( ) Other (please specify):

1.3 How many years have you worked in the company?

( ) less than 1 year

( ) 1-2 years

( ) 3-5 years

( ) 6-9 years

( ) 10-15 years

( ) more than 15 years

1.4 Please provide us with information on the company

Name:

Address:

Email:

Phone:

RTA A. Vecchi
mnsav@management.bath.ac.uk
University of Bath, School of Management
Bath, BA2 7AY
United Kingdom

1.5 Please state when the company was established

( ) less than 1 year

( ) 1-2 years

( ) 3-5 years

( ) 6-9 years

( ) 10-15 years

( ) more than 15 years

1.6 Number of workers

(Irrespective of their positions and including part time workers)

( ) 1-9

( ) 10-24

( ) 25-49

( ) 50-99

( ) 100-149

( ) 150-199

( ) 200-245

1.7 Type of company

( ) Subsidiary

( ) Independent/Head Quarter

1.8 Type of ownership

( ) Corporations

( ) Partnership

( ) Sole proprietorship

1.9 Ownership nationality

( ) National

( ) Foreign

1.10 Main product

( ) Formal shoes

( ) Casual Shoes

( ) Sport Shoes

( ) Safety Footwear

( ) Components

1.11 Market segment

( ) High range price

( ) Medium/high range price

( ) Medium range price

( ) Low range price

1.12 Technological level

( ) High

( ) Medium

( ) Low

RTA A. Vecchi
mnsav@management.bath.ac.uk
University of Bath, School of Management
Bath, BA2 7AY
United Kingdom

COMPANY RELATIONS WITH LOCAL PRODUCERS

2.1 How do you cooperate with other local producers?

	A lot	A little	Never
Exchange of information and experience			
Sharing orders			
Joint product development			
Lending machinery			
Joint marketing for products			
Joint labour training			
Joint purchase of input			

COMPANY RELATIONS WITH BUYERS

Could you please list **up to three buyers**, indicating for each one their geographical distance in miles from your company, your relationship length in terms of years, its nature and its content?

3.1 Buyer

Name:

Distance:

Length:

Relationship nature:

( ) A social relationship irrespective of any commercial/business relationship

( ) A strictly commercial/business relationship

( ) A social relationship as the result of any existing commercial/business relationship

RTA A. Vecchi
mnsav@management.bath.ac.uk
University of Bath, School of Management
Bath, BA2 7AY
United Kingdom

Content:

( ) Products

( ) Materials

( ) Services

3.2 Buyer

Name:

Distance:

Length:

Relationship nature:

( ) A social relationship irrespective of any commercial/business relationship

( ) A strictly commercial/business relationship

( ) A social relationship as the result of any existing commercial/business relationship

Content:

( ) Products

( ) Materials

( ) Services

3.3 Buyer

Name:

Distance:

Length:

Relationship nature:

( ) A social relationship irrespective of any commercial/business relationship

( ) A strictly commercial/business relationship

( ) A social relationship as the result of any existing commercial/business relationship

Content:

( ) Products

( ) Materials

( ) Services

3.4 How do you cooperate with your main buyer for the local market?

	A lot	**A little**	**Never**
Exchange of information and experience			
Negotiation of payment and delivery conditions			
Technological upgrading			
Quality control			
Setting of product specifications			
Organisation of production			

3.5 How do you cooperate with your main buyer for export?

	A lot	**A little**	**Never**
Exchange of information and experience			
Negotiation of payment and delivery conditions			
Technological upgrading			
Quality control			
Setting of product specifications			
Organisation of production			

RTA A. Vecchi
mnsav@management.bath.ac.uk
University of Bath, School of Management
Bath, BA2 7AY
United Kingdom

3.6 What percentage of your export goes to:

U.S:

Switzerland:

Canada:

Japan:

Russia:

Europe:

Others (please specify):

COMPANY RELATIONS WITH SUBCONTRACTORS

4.1 What of the following stages of production are currently outsourced?

	Yes	No
Ideation		
Design		
Printing		
Upper cutting		
Upper stitching		
Hand-stitching		
Heel covering		
Sole stitching		
Lasting		
Finishing		

RTA A. Vecchi
mnsav@management.bath.ac.uk
University of Bath, School of Management
Bath, BA2 7AY
United Kingdom

4.2 How do you cooperate with the subcontractors?

	A lot	A little	Never
Exchange of information and experience			
Negotiation of payment and delivery conditions			
Technological upgrading			
Quality control			
Setting of product specifications			
Organisation of production			

COMPANY RELATIONS WITH SUPPLIERS

Could you please list **up to three suppliers**, indicating for each one their geographical distance in miles from your company, your relationship length in terms of years, its nature and its content?

5.1 Supplier

Name:

Distance:

Length:

Relationship nature:

( ) A social relationship irrespective of any commercial/business relationship

( ) A strictly commercial/business relationship

( ) A social relationship as the result of any existing commercial/business relationship

RTA A. Vecchi
mnsav@management.bath.ac.uk
University of Bath, School of Management
Bath, BA2 7AY
United Kingdom

Content:

( ) Products

( ) Materials

( ) Services

5.2 Supplier

Name:

Distance:

Length:

Relationship nature:

( ) A social relationship irrespective of any commercial/business relationship

( ) A strictly commercial/business relationship

( ) A social relationship as the result of any existing commercial/business relationship

Content:

( ) Products

( ) Materials

( ) Services

5.3 Supplier

Name:

Distance:

Length:

Relationship nature:

( ) A social relationship irrespective of any commercial/business relationship

( ) A strictly commercial/business relationship

( ) A social relationship as the result of any existing commercial/business relationship

Content:

( ) Products

( ) Materials

( ) Services

5.4 How do you cooperate with your main suppliers of leather and plastic?

	A lot	**A little**	**Never**
Exchange of information and experience			
Negotiation of payment and delivery conditions			
Joint product development			
Improving quality			
Respect of delivery timing			

5.5 How do you cooperate with your main suppliers of soles?

	A lot	**A little**	**Never**
Exchange of information and experience			
Negotiation of payment and delivery conditions			
Joint product development			
Improving quality			
Respect of delivery timing			

5.6 What percentage of your import comes from:

China:

Vietnam:

Romania:

Indonesia:

Taiwan:

Thailand:

Others (please specify):

COMPANY RELATIONS WITH OTHER ORGANISATIONS

Have you or has the company any contact with any of the following?

6.1 Contact with any industry-based association?

	Yes/No	**How would you rate their relevance to your activity?** (1=Irrelevant 5= Very relevant)				
		1	**2**	**3**	**4**	**5**
Business owners' association						
Trade association						
Technology centre						

RTA A. Vecchi
mnsav@management.bath.ac.uk
University of Bath, School of Management
Bath, BA2 7AY
United Kingdom

6.2 Contact with any commercial associations?

	Yes/No	How would you rate their relevance to your activity? (1=Irrelevant 5= Very relevant)				
		1	2	3	4	5
Investor groups						
Business incubators						
Professional service events						
Consultants						

6.3 Contact with any government supported associations?

	Yes/No	How would you rate their relevance to your activity? (1=Irrelevant 5= Very relevant)				
		1	2	3	4	5
Firm advisors						
Training Enterprise Council (TECs)						
Regional development agency						
Training centres						
Universities						

RTA A. Vecchi
mnsav@management.bath.ac.uk
University of Bath, School of Management
Bath, BA2 7AY
United Kingdom

6.4 Contact with any special interest associations?

	Yes/No	How would you rate their relevance to your activity? (1=Irrelevant 5= Very relevant)				
		1	2	3	4	5
Environmental association						
Political party						

6.5 Contact with any community-based associations?

	Yes/No	How would you rate their relevance to your activity? (1=Irrelevant 5= Very relevant)				
		1	2	3	4	5
Parents/School groups						
Neighbourhood watch schemes						
Charity groups(Round table/Lions)						

RTA A. Vecchi
mnsav@management.bath.ac.uk
University of Bath, School of Management
Bath, BA2 7AY
United Kingdom

6.6 Contact with any social organisations?

	Yes/No	How would you rate their relevance to your activity? (1=Irrelevant 5= Very relevant)				
		1	2	3	4	5
Sports clubs						
Working clubs						

COMPANY PERFORMANCE

7.1 What is the value of the company annual sales turnover?

7.2 What percentage of it comes from export?

7.3 How would you rate your satisfaction with the financial performance of your business? (1=Unsatisfying 5=Very satisfying)

1	2	3	4	5

7.4 Is the company cash-flow positive?

( ) Yes

( ) No

7.5 What has been the production trend during the last five years?

( ) Increase

( ) Same

( ) Decrease

7.6 What is the value of profit for year 2001 (optional)?

7.7 What is the value of the net capital employed (total capital – borrowings)?

Thank you. Please verify the accuracy of the information provided before returning the questionnaire.

RTA A. Vecchi
mnsav@management.bath.ac.uk
University of Bath, School of Management
Bath, BA2 7AY
United Kingdom

Protocol for semi-structured interviews

The following are the main questions used in evaluating the linkages in Montebelluna and Northampton.

1. What were the reasons for choosing this firm?
2. What is the history behind this relationship?
3. Are there any social/family ties that exist with this firm? How does this influence the relationship?
4. Are the agreements with the firm of a formal or informal nature?
5. What happens if the firm breaks the agreement?
6. If you are dissatisfied with the quality of the products you obtain from this firm, do you look for an alternative source or do you cooperate to improve quality?
7. Do you know if this firms undertakes tasks from other customers?
8. Are you afraid that this firm spreads information about you and your production activities to your competitors?
9. What benefits do you obtain from this relationship? any critical information?
10. How has this relationship changed over time?

Montebelluna: additional tables

Table 6.9: Montebelluna - Distribution of Employment

YEAR	1 Emp.	2/10 Emp.	11/20 Emp.	21/100 Emp.	> than 100 Emp.	TOT.
1997	41	1.084	1.881	2.957	3.867	9.830
1998	70	1.127	1.754	3.060	3.095	9.106
1999	n.p.	n.p.	n.p.	n.p.	n.p.	8.596
2000	64	1.064	1.670	3.080	3.019	8.897
2001	62	975	1.311	2.761	3.673	8.782

(Source: Osem Report, 2001)

Table 6.10 Montebelluna - Employment variation of district firms 2000-2001

	2000	2001	Absolute Variation	%
Clothing	293	292	-1	-0,3%
Binding	118	121	3	2,5%
Assembling.	332	219	-113	-34,0%
Footwear	5661	5522	-139	-2,5%
Commercial firms	104	104	0	0,0%
Designers	87	105	18	20,7%
Die makers	47	42	-5	-10,6%
Shoe laces	39	39	0	0,0%
Machinery producers	124	165	41	33,1%
Plastic injection	454	452	-2	-0,4%
Moulders	162	112	-50	-30,9%
Sole producers	236	222	-14	-5,9%
Cutting	87	72	-15	-17,2%
Uppers	460	393	-67	-14,6%
Various tasks	928	922	-6	-0,6%
TOTAL	9.132	8.782	-350	-3,8%

(Source: Osem Report, 2001)

Table 6.11: Montebelluna – Evolution of district firms 2000 - 2001

	2000	2001	Absolute variation	%
Clothing	7	7	0	0,0%
Binding	5	5	0	0,0%
Assembling.	29	16	-13	-44,8%
Footwear	168	151	-17	-10,1%
Commercial firms	10	10	0	0,0%
Designers	22	27	5	22,7%
Die makers	3	3	0	0,0%
Shoe laces	6	6	0	0,0%
Machinery producers	4	4	0	0,0%
Plastic injection	25	23	-2	-8,0%
Moulders	7	6	-1	-14,3%
Sole producers	8	6	-2	-25,0%
Cutting	39	30	-9	-23,1%
Uppers	86	84	-2	-2,3%
Various tasks	41	41	0	0,0%
TOTAL	460	419	-41	-8,9%

(Source: Osem Report, 2001)

Montebelluna

Participating firms:

	Firms name	Respondent	Posit.	Quest.	Int.	Made-up names
1	********	********	Other	17.09.02	17.02.03	Alpha
2	********	********	CEO	17.09.02	14.02.03	Beta
3	********	********	Director	09.09.02	17.02.03	Gamma
4	********	********	Owner	10.09.02	14.02.03	Delta
5	********	********	Owner	11.09.02	17.02.03	Epsilon
6	********	********	Owner	14.12.02	17.02.03	Zeta
7	********	********	Owner	14.12.02	10.03.03	Eta
8	********	********	Owner	29.08.02	18.02.03	Theta
9	********	********	Other	18.11.02	18.02.03	Iota
10	********	********	Director	18.11.02		Kappa
11	********	********	Other	19.11.02	14.02.03	Lamda
12	********	********	Owner	20.11.02	14.04.03	Mu
13	********	********	Other	20.11.02	14.04.03	Nu
14	********	********	Owner	01.09.03	09.09.03	Xi

Declined:

Firm	Contact	Date	Reason
********	********	10.09.02	Company considerations
********	********	18.11.02	Time
********	********	20.11.02	Time
********	********	01.09.03	Confidentiality

Key-informants:

Contact	Position
********	Ski-boots Museum
********	Treviso Chamber of Commerce
********	Ostani S.r.l.
********	Calz. Trebi

Northampton

Participating firms:

	Firms name	Respondent	Posit.	Quest.	Int.	Made-up names
1	********	********	Director	16.11.02	18.12.02	Alpha
2	********	********	Director	16.11.02	18.12.02	Beta
3	********	********	Owner	18.11.02	08.01.03	Gamma
4	********	********	Owner	28.05.03	10.06.03	Delta
5	********	********	Owner	5.12.03	08.01.03	Epsilon
6	********	********	Director	27.02.02	16.12.03	Zeta
7	********	********	Director	14.05.03	04.06.03	Eta
8	********	********	Owner	14.05.03	10.06.03	Theta
9	********	********	Owner	27.02.02	16.12.03	Iota
10	********	********	Owner	28.05.03	04.06.03	Kappa
11	********	********	Owner	04.06.03	05.12.03	Lamda
12	********	********	Owner	04.06.03	10.06.03	Mu
13	********	********	Owner	28.02.03	16.12.03	Nu
14	********	********	Owner	28.02.03	16.12.03	Xi

Declined:

Firm	Contact	Date	Reason
********	********	01.12.03	Confidentiality
********	********	10.06.03	Time
********	********	01.03.03	Time
********	********	01.03.03	Structural change

Key-informants:

Contact	Position
********	BFA – National level
********	BFA – Northampton
********	Satra (Technology centre)
********	Satra (Technology centre)
********	Church & Co.